SOUTH CAROLINA PUBLIC SERVICE COMMISSION

DOCKET NO. 1995-1192-E

In the Matter of:	)	
	)	**DIRECT TESTIMONY OF**
Proceeding for Approval of the	)	**GLEN A. SNIDER**
Public Utility Regulatory Policies	)	**ON BEHALF OF DUKE ENERGY**
Act of 1978 (PURPA) Avoided	)	**CAROLINAS, LLC AND DUKE**
Cost Rates for Electric	)	**ENERGY PROGRESS, LLC**
Companies	)	

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Glen A. Snider. My business address is 400 South Tryon Street, Charlotte, North Carolina 28202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am currently employed by Duke Energy as Director of Carolinas Integrated Resource Planning and Analytics.

Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES IN YOUR POSITION WITH DUKE ENERGY.

A. I am responsible for the supervision of the Integrated Resource Plans ("IRPs") for both Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP," together with DEC, the "Utilities" or the "Companies"). In addition to the production of the IRPs, I have responsibility for overseeing the analytic functions related to resource planning for the Carolinas region. Examples of such analytic functions include unit retirement analyses, the analytical support for applications for certificates of environmental compatibility and public convenience and necessity for new generation, and analyses required to support the Utilities' avoided cost calculations that are used in the biennial avoided cost rate proceedings.

Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. My educational background includes a Bachelor of Science in mathematics and a Bachelor of Science in economics from Illinois State University. With respect to professional experience, I have been in the utility industry for over thirty years. I started as an associate analyst with the Illinois Department of Energy and Natural Resources, responsible for assisting in the review of Illinois utilities' integrated resource plans. In 1992, I accepted a planning analyst job with Florida Power Corporation and for the past eighteen years have held various management positions within the utility industry. These positions have included managing the Risk Analytics group for Progress Ventures and the Wholesale Transaction Structuring group for ArcLight Energy Marketing. Immediately prior to the merger of Duke Energy Corporation and Progress Energy, I was Manager of Resource Planning for Progress Energy Carolinas.

Q. ARE YOU INCLUDING ANY EXHIBITS IN SUPPORT OF YOUR TESTIMONY?

A. Yes, I am sponsoring 15 exhibits, which are described below:

- **Snider DEC Exhibit 1** presents a redlined copy of DEC's Purchased Power Schedule PP.
- **Snider DEC Exhibit 2** presents a clean copy of DEC's Purchased Power Schedule PP.
- **Snider DEC Exhibit 3 (Confidential)** presents the supporting calculations used to derive the avoided energy and avoided capacity rates. Information included in Exhibit 3 is designated Confidential and is being filed under seal.
- **Snider DEC Exhibit 4** presents a redlined copy of DEC's Standard PPA available to QFs eligible for Schedule PP.
- **Snider DEC Exhibit 5** presents a clean copy of DEC's Standard PPA available to QFs eligible for Schedule PP.
- **Snider DEC Exhibit 6** presents a redlined copy of DEC's Terms and Conditions for the Purchase of Electric Power ("Terms and Conditions").

- **Snider DEC Exhibit 7** presents a clean copy of DEC's Terms and Conditions.
- **Snider DEP Exhibits 1-7** present the same information for DEP as described above for DEC. DEP Exhibit 3 is also designated Confidential and is being filed under seal.
- **Snider DEC/DEP Exhibit 8** presents the information contained in Figure 3 and Figure 4 in a larger format for readability purposes.

Snider DEC Exhibits 1-7 and Snider DEP Exhibits 1-7 were also filed in this proceeding in support of the Companies' Application for Approval of Updated Standard Offer Avoided Cost Rates and Tariffs on November 30, 2018.

Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes, these exhibits were prepared by me or at my direction and under my supervision.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to support the Utilities' methodology for calculating avoided capacity and avoided energy cost, and other recommendations related to the Companies' payments to qualifying facilities ("QFs") pursuant to the Public Utility Regulatory Policies Act of 1978 ("PURPA"). More specifically, my testimony provides recommendations relating to the fair and appropriate calculation of avoided capacity and avoided energy costs used to compensate QFs under the Companies' standard avoided cost tariffs (Schedule PP). My testimony is organized into the following sections:

1. Introduction and Purpose
2. Overview of PURPA avoided cost framework;

3. Recent market developments that have occurred since the 2016 updates to the Companies' avoided cost rates;
4. Description of the peaker methodology used to calculate avoided costs under PURPA;
5. Avoided capacity cost calculation and rate design methodology;
6. Avoided energy cost calculation and rate design methodology;
7. Integration services charge associated with intermittent solar generation; and
8. Modifications to the Purchased Power Agreement ("PPA") and Terms and Conditions for the purchase of electric power under Schedule PP.

II. OVERVIEW OF PURPA AVOIDED COST FRAMEWORK

Q. PLEASE PROVIDE THE COMMISSION WITH A GENERAL EXPLANATION OF PURPA AND ITS ORIGINAL PURPOSE.

A. While I am not an attorney, I have had occasion to become familiar with the PURPA law and implementing regulations through my role as an expert witness testifying on behalf of the Companies in multiple prior avoided cost proceedings, principally in North Carolina.

PURPA was enacted in 1978 in response to the mid-1970s energy crisis, to promote conservation of oil and natural gas by electric utilities, thereby lessening the country's dependence on foreign oil, and ultimately intending to control costs for consumers. Section 210 of PURPA established a new policy of encouraging development of non-utility-owned cogeneration and small power production facilities. Those non-utility-owned cogeneration and small power production facilities are called Qualifying Facilities, or "QFs."

To encourage development of this new class of wholesale power generators, Congress mandated that QFs should have the right to sell power to and purchase back-up power from traditional utilities.[1] This is often called the "mandatory purchase obligation," as it requires utilities to purchase all of the output of these facilities. Congress also decided that these facilities should be exempt from certain financial and rate regulation burdens imposed on traditional public utilities, effectively exempting these generators from federal or state regulatory oversight of their books and cost of service.[2] Thus, from PURPA's initial enactment, Congress provided significant "regulatory encouragement" to QFs compared to traditional fully-regulated public utilities.

Section 210 of PURPA was also expressly focused on controlling costs for consumers, requiring utilities to purchase power from QFs at non-discriminatory rates that are just and reasonable to the utility's customers and in the public interest.[3] Congress specifically directed the Federal Energy Regulatory Commission ("FERC") to develop regulations to implement PURPA, but, in doing so, explicitly forbade such rules from requiring a utility to pay a rate that would exceed the utility's "incremental cost" of its alternative options of generating or purchasing electric energy.[4] Congress was clear that PURPA was not intended to require the ratepayers of a utility to subsidize QFs.[5] Accordingly, PURPA limits the rates to be paid to QFs to the purchasing utility's incremental or "avoided" cost, which ensures customers remain indifferent between the

[1] *See* 16 U.S.C. § 824a-3(a); *Final Rule Regarding the Implementation of Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, FERC Stats. & Regs. ¶ 30,128 (1980) ("Order No. 69").
[2] *Id*.
[3] 16 U.S.C § 824a-3(b)(1).
[4] 16 U.S.C § 824a-3(b); (d).
[5] Joint Explanatory Statement of the Committee of Conference, H.R. Conf. Rep. 95-1750 at p. 89, 95th Cong., 2d. Sess. 99 (1978) ("The provisions of [section 210] are not intended to require the rate payers of a utility to subsidize cogenerators or small power producers.").

costs of utility or non-utility generation. Thus, on its face, Section 210's encouragement of cogeneration and small power production facilities provides QFs a right to sell at rates that are "just and reasonable to the electric consumers . . . and in the public interest" but, importantly, has never expressed a legislative intent to unjustly subsidize this new class of non-utility generators.[6]

Q. PLEASE EXPLAIN THE ROLE OF FERC AND THE ROLE OF THIS COMMISSION IN IMPLEMENTING PURPA.

A. Congress gave important roles to both FERC and the state commissions in implementing PURPA. As I understand it, Congress directed FERC to promulgate regulations to implement PURPA, while state regulatory authorities, such as this Commission, are ultimately responsible for state-by-state PURPA implementation in a manner consistent with FERC's regulations.[7]

In 1980, FERC issued its landmark rulemaking order, Order No. 69, that sets forth PURPA's implementing regulations.[8] Order No. 69 explains that state commissions are afforded "great latitude" in determining state PURPA policies because they are best suited to consider and balance PURPA's goals with the "economic and regulatory circumstances [that] vary from state to state and utility to utility."[9] Thus, PURPA provides the Commission authority to oversee the Companies' avoided cost rates and, as appropriate, to

[6] 18 C.F.R. § 292.305(a)(1)(i).
[7] *Policy Statement Regarding Comm'n's Enforcement Role Under Sec. 210 of the Public Utility Regulatory Policies Act of 1978*, 23 FERC ¶ 61,304, 61,644 (1983) (stating how state regulatory authorities are required to implement PURPA pursuant to section 210 either (1) through enactment of laws or regulations; (2) by application on a case-by-case basis; or, (3) by any other action reasonably designed to implement FERC's PURPA regulations).
[8] *Order No. 69*
[9] *Id.* at 93-94.

take into consideration local conditions and economic and regulatory circumstances, as the Commission determines appropriate.

Q. PLEASE DESCRIBE FERC'S REQUIREMENT THAT UTILITIES PROVIDE "STANDARD RATES" FOR PURCHASES FROM SMALLER QFS.

A. In Order No. 69, FERC recognized that smaller QFs could be challenged by the transactional costs of negotiating power purchase contracts with utilities, and required states implementing PURPA to make standard rates and terms available to QFs 100 kW and smaller that want to sell their power to the utility.[10] Under FERC's regulations, states "may" establish standard rates and terms for QFs greater than 100 kW. FERC explained in Order No. 69 "that the establishment of standard rates for purchases can significantly encourage cogeneration and small power production, provided that these standard rates *accurately reflect the costs* that the utility can avoid as a result of such purchases."[11] Thus, in setting the "mandatory purchase obligation" requirements, FERC mandated that small QF generators of 100 kW or less be offered standard avoided cost rates, while leaving it to the implementing state commission to determine whether to offer standard avoided cost rates to QF generators greater than 100 kW.[12] Where a state elects to make standard offer rates available to QF generators sized greater than 100 kW, it becomes increasingly important to ensure the offered avoided cost rates remain accurate and do not deviate from the costs that the utility can actually avoid.

III. RECENT MARKET DEVELOPMENTS THAT HAVE OCCURRED SINCE THE 2016 UPDATES TO THE COMPANIES' AVOIDED COST RATES

[10] 18 C.F.R. 292.304(c).
[11] *Order No. 69* at 53 (emphasis in the original).
[12] 18 C.F.R. 292.304(a)-(f).

Q. PLEASE DESCRIBE THE COMMISSION'S MOST RECENT ACTION ON DEC'S AND DEP'S STANDARD OFFER AVOIDED COST TARIFFS IN 2016.

A. In Order No. 2016-349, the Commission most recently approved updated avoided cost rates for DEC and DEP in each utility's respective Schedule PP Purchase Power Tariff ("Schedule PP"), and Terms and Conditions, which became effective July 1, 2016. Order No. 2016-349, issued in May 2016, approved the Companies' offer of variable, 5-year, and 10-year term standard offer avoided cost rates for QFs up to 2 MW in size, consistent with the rates that had been most recently approved by the North Carolina Utilities Commission ("NCUC") at the time in NCUC Docket No. E-100, Sub 140.[13]

Q. PLEASE DESCRIBE THE COMPANIES' RECENT EXPERIENCE OF SIGNIFICANT SOLAR GROWTH UNDER THE STANDARD OFFER RATES ADOPTED IN 2016.

A. Over the past few years, the Companies have seen an exponential increase in the amount of solar being developed in South Carolina. For background, it is important to note that modest QF development occurred in the Companies' South Carolina service territories through the 2000s, with the majority of QFs being small hydroelectric facilities. Beginning in 2015, however, interest in developing new solar projects began to grow both from the Companies' customers, as well as from third-party developers in response to the General Assembly's enactment of the Distributed Energy Resources ("DER") Program Act, also known as Act 236. Under Act 236, DEC and DEP are each required to procure a combination of smaller "customer scale" DER facilities sized less than 1 MW (which are

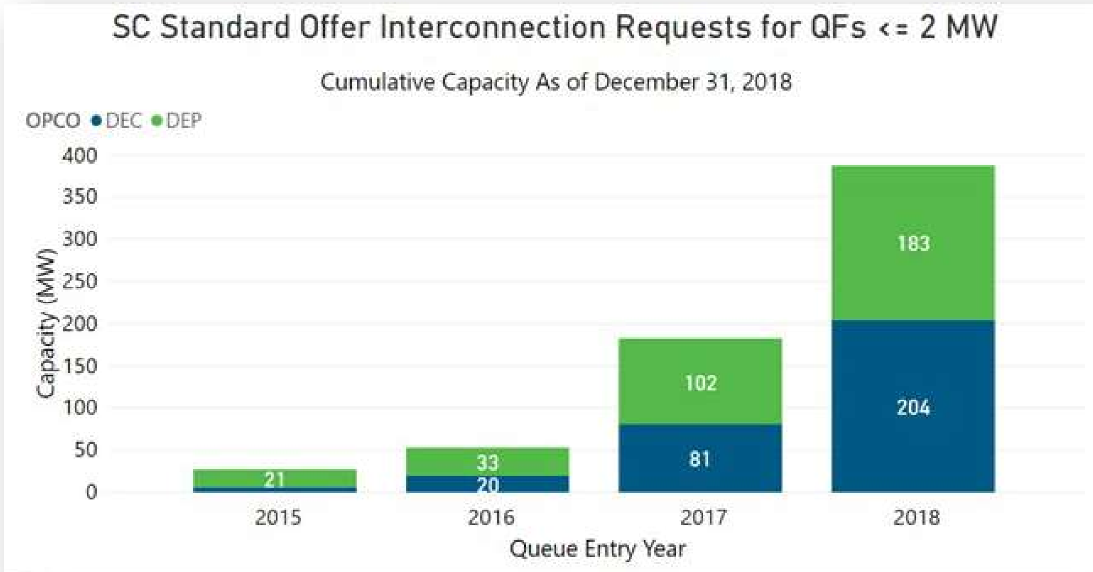
[13] *Order Establishing Standard Rates and Contract Terms for Qualifying Facilities*, NCUC Docket No. E-100, Sub 140 (Dec. 31, 2015) ("NC Sub 140 Standard Offer Rate Order").

generally net metering facilities), as well as larger "utility scale" DER facilities sized between 1 and 10 MW.[14] The Companies' DER programs require DEC to procure approximately 40 MW of "customer scale" DER facilities and 40 MW of "utility scale" DER facilities, while DEP is required to procure approximately 13 MW of "customer scale" DER facilities and 13 MW of "utility scale" DER facilities, all by January 1, 2021.[15]

Independent of the Companies' ongoing Act 236 compliance efforts, DEC and DEP have experienced rapid development of solar QFs, including projects 2 MW or less that qualify for Schedule PP. From 2015 to 2018, the Companies experienced an approximate 1,600% increase in the total megawatts of solar QFs sized 2 MW or less requesting to interconnect to the Companies' South Carolina system. Figure 1 details this exponential growth by presenting how the Companies' South Carolina interconnection queues have grown over the past four years with respect to solar QFs sized 2 MW or less.

[14] S.C. Code Ann. Section 58-27-130.
[15] *Order Addressing Distributed Energy Resource Program and Approving Settlement Agreement,* Order No. 2015-514, Docket No. 2015-53-E (July 15, 2015); *Order Addressing Distributed Energy Resource Program and Approving Settlement Agreement,* Order No. 2015-515, Docket No. 2015-55-E (July 15, 2015).

Figure 1



Q. DO THE COMPANIES ALSO HAVE A SIGNIFICANT AMOUNT OF SOLAR ALREADY INSTALLED ON THE THEIR SYSTEMS?

A. Yes. DEC and DEP have already installed, on a system-wide basis, over 2,800 MW of third-party owned, utility-scale solar, with approximately 2,165 MW located in DEP and 660 MW located in DEC. Growth in solar is also expected to continue across the Companies' systems at unprecedented rates, as the Companies currently have over 12,300 MW of solar interconnection requests in their combined South Carolina and North Carolina interconnection queues. Approximately 5,700 MW of these solar projects are proposing to interconnect to DEC's and DEP's systems in South Carolina.

Q. IN ADDITION TO UNPRECEDENTED SOLAR DEVELOPMENT, WHAT OTHER NOTABLE CHANGES HAVE OCCURRED SINCE ADOPTION OF THE STANDARD OFFER RATES IN 2016?

A. A number of factors that drive the avoided cost calculation have also changed since 2016, including load and energy forecasts, resource mix, unit characteristics, variable operations and maintenance ("VOM") costs, environmental emissions costs, reagent costs and fuel costs. While updating items such as VOM costs, environmental reagent costs, and the relative efficiency of the marginal unit with the most current information all factor into the utility's marginal cost of generation, recent changes in the commodity market price for natural gas represents the most significant change impacting the Companies' avoided costs. This is because natural gas commodity prices represent the primary driver of the avoidable energy cost since a natural gas-fueled combined-cycle unit or combustion turbine unit is often the marginal resource. I discuss how these inputs factor into the avoided energy and capacity cost calculations later in my testimony.

Q. WITH RESPECT TO RECENT CHANGES IN NATURAL GAS COMMODITY PRICES, PLEASE ADDRESS THE SIGNIFICANT MARKET CHANGES THAT HAVE OCCURRED IN RECENT YEARS.

A. There is little debate that advancements in shale gas production have changed the natural gas market landscape, drastically reducing the cost of natural gas. Consequently, and by extension, the Companies' and other utilities' cost of avoidable energy production has also declined significantly over the last several years. This transformation has occurred at a rapid pace and has resulted in sustained lower natural gas prices.

As I stated, natural gas commodity prices are a significant input into the avoided energy rate calculation. Just as the Companies' customers have benefited from recent significant declines in the future price of natural gas, these declining gas prices have also caused a significant reduction in the Companies' avoided energy costs. For example, the

10-year avoided energy rates presented in this filing reflect an approximate 40% reduction in the 10-year forecasted natural gas prices when compared to the 10-year natural gas prices used in rates approved by the Commission in 2016.

IV. DESCRIPTION OF THE PEAKER METHODOLOGY USED TO CALCULATE AVOIDED COSTS UNDER PURPA

Q. WHAT METHODOLOGY DO THE COMPANIES USE TO CALCULATE AVOIDED COST?

A. DEC and DEP have consistently used the "peaker methodology" to determine avoided capacity and energy costs for setting the avoided cost rates paid to QFs.

Q. PLEASE EXPLAIN THE THEORY UNDERLYING THE PEAKER METHODOLOGY.

A. The peaker methodology assumes that when a utility's generating system is operating at equilibrium, the installed fixed capacity cost of a simple-cycle combustion turbine ("CT") generating unit (a "peaker"), plus the variable marginal energy cost of running the system, will produce a reasonable proxy for the marginal capacity and energy costs that a utility will avoid by purchasing power from a QF. Consistent with PURPA, the peaker methodology is designed to ensure that purchases from new QF generation is not more expensive than the avoided capacity cost of a peaker plus the utility's forecasted avoided system marginal energy cost.

Q. WHY IS IT APPROPRIATE TO USE THE COST OF A SIMPLE-CYCLE CT OR "PEAKER" IN CALCULATING AVOIDED CAPACITY COST?

A. A simple-cycle CT represents the lowest capital cost resource option from a fixed cost perspective and thus, represents the marginal capacity resource of choice. As discussed later, the simple-cycle CT is assumed to only provide marginal capacity value, while energy is served from the utility's existing system marginal resources. Within the context of an IRP, the utility only selects more expensive capital facilities, such as natural gas combined-cycle baseload units, when the incremental efficiency of the unit (as compared to a simple-cycle peaker) provides enough marginal energy value to more than compensate for the incremental capital cost. Stated simply, a baseload facility is only chosen if the system fuel savings offset its higher capital cost and thus produce a net cost savings for consumers relative to a peaker. In essence, any resource added to the utility's portfolio must first be cost effective under the "peaker methodology" and as such, even if a utility's next planned unit is not a simple-cycle peaker, the "peaker methodology" still accurately represents a valid estimate of the utility's avoided costs.

Q. PLEASE DESCRIBE THE DIFFERENCE BETWEEN AVOIDED ENERGY COSTS AND AVOIDED CAPACITY COSTS UNDER THE PEAKER METHODOLOGY.

A. Avoided energy costs represent an estimate of the variable costs that are avoided and would have otherwise been incurred by the utility but for the purchase from a QF. Avoided energy costs, which are expressed in dollars per megawatt hour ("$/MWh"), include items such as avoided fuel, avoided variable environmental costs and avoided VOM costs. Avoided capacity costs, on the other hand, represent fixed costs associated with the construction, financing and staffing of a CT. The fixed costs are the annual costs incurred to have production capacity available and dispatchable on demand. These costs do not depend on the actual use of the CT but rather the costs to build the CT and have it available to meet customer demand. Fixed costs associated with one kilowatt ("kW") of capacity are normally represented as a $/kW-Yr value for each kW of CT capacity that could be avoided. As an analogy, if one was to purchase an electric vehicle, the avoided gasoline and avoided oil changes of a gas-powered vehicle would be the equivalent of avoided energy costs, which include avoided fuel costs and VOM. In addition, to the extent the electric vehicle offsets the purchase of a gas-powered vehicle; the car payment for the gas-powered vehicle would represent the fixed cost being avoided in the capacity payment.

Q. DOES THE PEAKER METHODOLOGY ALLOW THE COMPANIES TO FAIRLY AND APPROPRIATELY CAPTURE AND ESTIMATE THEIR AVOIDED COSTS OR THE COSTS THAT WOULD HAVE OTHERWISE BEEN INCURRED BUT FOR THE PURCHASE FROM THE QF?

A. Yes. When the utility's generating system is operating at equilibrium, the peaker methodology provides a reasonable and appropriate estimate of the avoided or incremental costs of alternative energy that would have otherwise been incurred but for the purchase from a QF facility. The following sections of my testimony provide additional detail regarding the manner in which the Companies have applied the peaker methodology consistent with PURPA.

V. AVOIDED CAPACITY COST CALCULATION AND RATE DESIGN METHODOLOGY

Q. IN GENERAL TERMS, HOW ARE AVOIDED CAPACITY COSTS CALCULATED UNDER THE PEAKER METHODOLOGY?

A. The peaker methodology credits avoided capacity value to the QF based on the utilities' cost to construct a simple-cycle CT. These costs represent the fixed capital, financing and fixed operating costs associated with the construction and operation of a CT facility. The fixed investment costs are then converted to an annual cost that includes both the recovery-of and return-on the investment in the CT, along with the annual fixed operating costs, such as staffing. Once an annual value is established, it is allocated to the capacity payment hours defined in the avoided cost rate schedule and expressed in cents per kWh. As I noted in the analogy of the QF as an electric vehicle, the avoided capacity cost is the annual car payment for the avoided gas-powered vehicle along with other fixed costs such as taxes.

Q. HOW SHOULD THE AVOIDED CAPACITY COST CALCULATION METHODOLOGY BE APPLIED TO ENSURE CUSTOMERS ARE NOT PAYING MORE FOR QF CAPACITY THAN THE ACTUAL COSTS THAT THE UTILITY AVOIDS FROM SUCH A PURCHASE?

A. The Companies rely upon several key elements in the application of the peaker methodology that relate to aligning the avoided cost rates that our customers ultimately pay with the value of the capacity that QFs actually deliver and our customers ultimately receive. These factors include calculating the annual avoided capacity value of a CT; determining the years in which the utilities actually have an avoidable capacity need; determining how annual capacity payments are made to the QF supplier; and applying an appropriate Performance Adjustment Factor ("PAF").

Q. DID THE COMPANIES CALCULATE THE ANNUAL AVOIDED CAPACITY VALUE OF A CT FOR PURPOSES OF DETERMINING THE AVOIDED CAPACITY VALUE?

A. Yes. DEC and DEP each calculated their respective avoided capacity cost based on the cost of a simple cycle combustion turbine. The Companies' CT capital cost estimate was based on publicly available data from the Energy Information Administration ("EIA").

Q. IS THE UTILITIES' NEED FOR CAPACITY ACCOUNTED FOR IN THE CALCULATION OF THE AVOIDED CAPACITY PAYMENT?

A. Yes.

Q. HOW IS THE NEED FOR INCREMENTAL GENERATING CAPACITY DETERMINED IN THE CALCULATION OF THE AVOIDED CAPACITY PAYMENT?

A. As I explained earlier in my testimony, avoided capacity costs are represented on an annual basis in a similar fashion to the fixed cost of a car being represented as an annual car payment. To appropriately incorporate the need for capacity consistent with PURPA, the annual fixed capacity costs used in the avoided cost rate should only include the annual fixed capacity costs starting with the first year in which an actual avoidable capacity need exists as determined by the utilities' most recently filed IRPs.

Q. HOW IS THE INTEGRATED RESOURCE PLAN UTILIZED TO DETERMINE WHEN AN AVOIDABLE CAPACITY NEED EXISTS?

A. The IRP is an extensive annual planning effort which presents a 15-year resource plan that identifies when the next generating unit is needed in order to maintain reliable electric service into the future. Prior to the year in which the next avoidable generation unit is needed, the utility does not have a capacity need to avoid. Thus, the calculation of the capacity portion of the avoided cost rate does not include a capacity value for years prior to the first avoidable capacity need. Again, as a central tenet of PURPA, customers shall not pay for incremental QF capacity unless the QF is actually offsetting a capacity need by the utility.

Q. IN WHAT YEARS DO THE COMPANIES' INTEGRATED RESOURCE PLANS IDENTIFY THE FIRST AVOIDABLE CAPACITY NEED?

A. The first avoidable capacity need for DEC is 2028. The first avoidable capacity need for DEP is 2020.

Q. DOES ACCOUNTING FOR THE TIMING OF NEEDED CAPACITY MORE ACCURATELY VALUE THE CAPACITY BEING DELIVERED BY THE QF, CONSISTENT WITH THE INTENT OF PURPA?

A. Yes. PURPA's clear intent is to estimate costs that, but for purchase from the QF, would have otherwise been incurred by the utility and its customers. Let's assume that weak economic conditions result in flat or declining load combined with a large influx of QFs that have eliminated all future needs for the addition of fossil generation capacity. In such an example, incremental QFs would still be credited for avoiding marginal fuel and production costs based on the utility's generation fleet (avoided energy value); however, incremental QFs would not receive a credit for avoided capacity because there would be no fixed costs to offset or avoid as the utility would not have a need to construct new generating capacity to reliably serve its customers. Under those circumstances, crediting a QF for avoiding a non-existent future capacity need would clearly be inconsistent with PURPA. This PURPA principle similarly requires the recognition that if the utility's first avoidable capacity need is several years in the future, then the present avoided capacity rate should only reflect capacity value in that future period when there is a capacity need to avoid. Otherwise, customers would be paying a QF for marginal capacity that is providing no actual benefit to serve their needs for capacity.

Q. IF A UTILITY'S NEXT AVOIDED CAPACITY NEED IS SEVERAL YEARS IN THE FUTURE, WHEN DOES THE QF BEGIN RECEIVING A CAPACITY PAYMENT?

A. Under the levelized Schedule PP rate design, discussed below, the QF would still receive an avoided capacity payment starting in the first year of the Schedule PP contract. More precisely, the QF will receive a ten-year levelized capacity rate that both takes into account a zero value in the initial years prior to the utility's first avoidable need as well as an avoidable capacity value in all subsequent years of the avoided cost calculation period. Put another way, the QF will receive capacity payments during each year of the contract, in order to credit the QF for the future avoided capacity, so long as the utility has an avoidable capacity need within the ten year avoided cost calculation period.

Q. IS THE CONSIDERATION OF THE UTILITIES' NEED FOR CAPACITY IN THIS CALCULATION FAIR TO THE COMPANIES' CUSTOMERS?

A. Yes, the utilities' customers only pay the QF capacity payments equal to the economic value of the utility's actually avoided capacity cost.

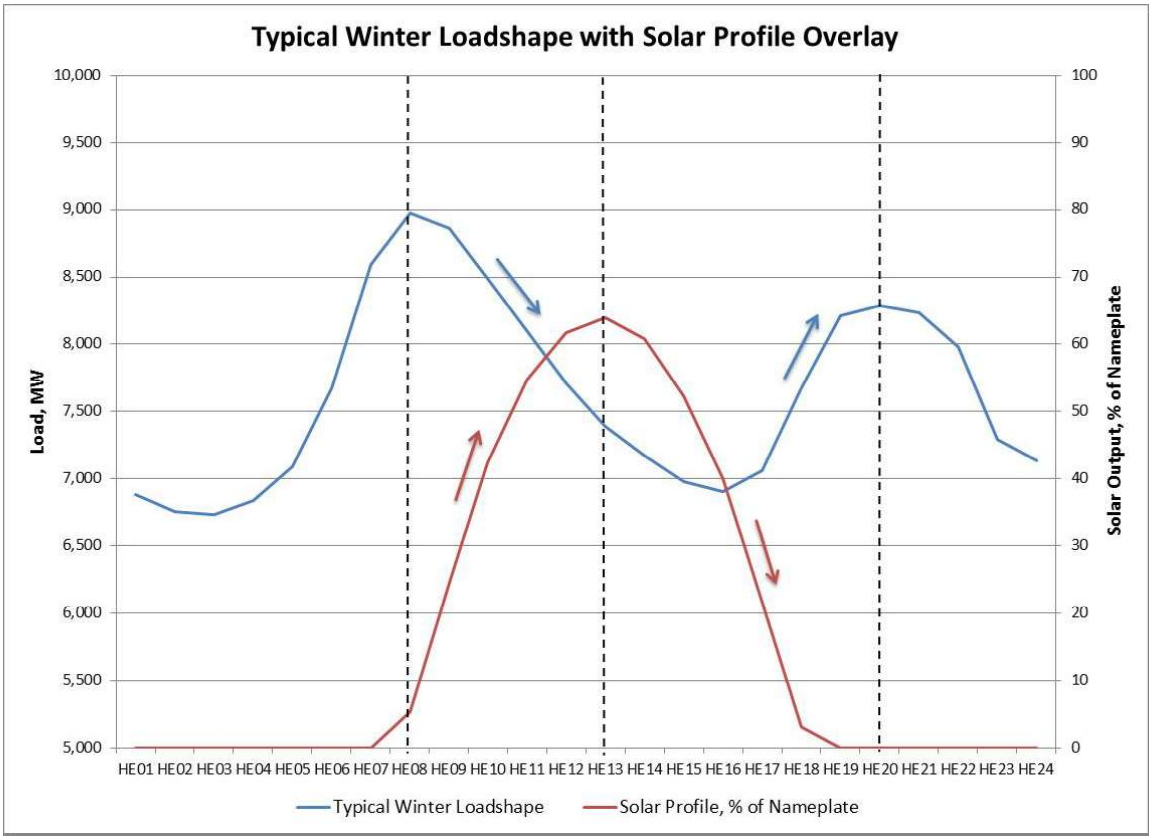
Q. WHAT METHOD DO THE COMPANIES RECOMMEND FOR PAYING QFS FOR CAPACITY VALUE?

A. With respect to QF rates, the Companies recognize that traditional methods of paying for dispatchable capacity based on deliverability requirements with after-the-fact adjustments for actual unit performance, are particularly problematic for smaller intermittent QF resources. To overcome these deliverability challenges and the lack of QF dispatchability, the Companies' QF capacity rates are paid on a per-kWh basis across a pre-determined set of seasonal hours that represent the hours most likely to have capacity value, as described later in my testimony. Paying QFs for capacity on a per-kWh basis is consistent with the approach the Companies have historically utilized with respect to QF rate design under prior vintages of Schedule PP.

Q. PLEASE EXPLAIN WHY CAPACITY PAYMENTS SHOULD NOT BE PAID BASED ON THE INSTALLED NAMEPLATE CAPACITY OF EACH QF.

A. Paying QFs for capacity based on the installed nameplate capacity of each QF would be inconsistent with the letter and intent of PURPA because the installed nameplate capacity of an intermittent QF resource (expressed in kW) does not translate to an equivalent amount of avoided capacity. Payment based upon installed capacity fails to recognize the actual performance of the generator which would lead to over-payments by customers relative to the value of the actual avoided capacity realized. Consider the following Figure 2 which shows an example of a solar production profile for a typical peak winter day compared to a utility load profile for the same day. As shown in the figure, the availability of solar capacity does not coincide with the peak demand needs of the utilities' customers. In fact, the figure shows that during critical peak hours, solar output is moving in the opposite direction of customer demand.

Figure 2: Winter Loadshape with Solar Profile Overlay



Q. PLEASE DESCRIBE THE SEASONAL ALLOCATION WEIGHTING THAT IS INCLUDED IN THE DETERMINATION OF THE AVOIDED CAPACITY PAYMENTS.

A. The Schedule PP rate design reflects changes to the pre-existing seasonal allocation weighting for capacity payments. The new seasonal allocation is heavily weighted to winter based on the impact of summer versus winter loss of load risk. The seasonal allocation is driven by the volatility in winter peak demand, as well as the growing penetration of solar resources and its associated impact on summer versus winter reserves. As presented in the Companies' 2018 IRPs, 100% of DEP's loss of load risk occurs in the winter and approximately 90% of DEC's loss of load risk occurs in the winter. Thus, DEP's new rates pay all of its annual capacity value in the winter while DEC's new rates pay 90% of its annual capacity value in the winter and the remaining 10% in the summer period.

Q. DID THE COMPANIES MAKE ANY CHANGES TO THE AVOIDED COST HOURLY RATE DESIGN PERIODS COMPARED TO THE PRE-EXISTING RATE DESIGN?

A. Yes. Due to the surging QF growth experienced in the Companies' service territories over the past few years, the Companies have evaluated the continued appropriateness of the pre-existing rate design and determined that changes to the hour definitions of both the avoided energy and avoided capacity components are needed to align with cost causation and to send more appropriate price signals to QFs. Regarding avoided capacity, the Companies determined that the capacity rates paid to QFs under the pre-existing Schedule PP should be revised to better align with the amount of capacity that the QF generators actually allow the Companies to avoid. This is particularly appropriate for solar QFs which lack coincidence with customers' highest demand periods, as illustrated in Figure 2.

Q. HAVE THE COMPANIES MORE PRECISELY IDENTIFIED THE SPECIFIC HOURS WHEN QFS WILL PROVIDE CAPACITY VALUE?

A. Yes. The Companies' new Schedule PP capacity rate design offers three distinct pricing periods to accurately reflect the marginal capacity value to customers during each period. The updated pricing periods offer capacity payments during the summer months of July and August and winter months of December through March. The highest prices are paid in the early morning winter hours to recognize the greater loss of load risk and greater value of capacity during those hours. The three capacity pricing periods are the same for DEC and DEP and are shown in Figure 3 below. Compared to the pre-existing rate design, the three distinct pricing periods focus on fewer hours and more precisely reflect the value of QF capacity. DEP's higher avoided capacity payment compared to DEC is due to DEP's earlier avoidable capacity need in 2020 versus DEC's first capacity need in 2028.

<u>Figure 3: Avoided Capacity Rate Design Pricing Periods</u>[16]

Filed Capacity Rates

Independent Capacity Price Blocks			1) Summer Capacity								2) Winter AM Capacity								3) Winter PM Capacity					
Company Rate (cents/KWH)			DEC 0.21		DEP 0.00						DEC 0.97		DEP 11.15						DEC 0.31		DEP 4.78			
DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jul - Aug)																	(1) Summer Capacity							
Winter (Dec - Mar)							(2) Winter AM Capacity												(3) Winter PM Capacity					

Prior Capacity Rates

Independent Capacity Price Blocks						1) Summer Capacity										2) Non-Summer Capacity								
Company Rate (cents/KWH)						DEC 6.68		DEP 6.27								DEC 2.58		DEP 2.43						
DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun - Sep)														(1) Summer Capacity										
Non-Summer (Oct - May)							(2) Non-Summer Capacity																	

Q. PLEASE EXPLAIN WHY A PERFORMANCE ADJUSTMENT FACTOR, OR "PAF," IS RECOGNIZED IN THE AVOIDED CAPACITY CALCULATION.

A. Given that the utility's avoided fleet resources are occasionally unavailable, it necessarily follows that QFs replacing those resources should not be penalized for experiencing the same level of unavailability typically experienced by the resources it is displacing. The PAF is a simple reliability equivalence multiplier that is included in the avoided capacity rates paid by the Companies' customers to QFs. This multiplier increases the avoided capacity rate paid by customers and received by the QF. The Companies included a 1.05 PAF in the avoided capacity calculation as an adjustment to reflect the reliability

[16] Snider DEC/DEP Exhibit 8 provides a larger version of Figure 3 for readability purposes.

equivalence of the Companies' generation fleet. For example, if the avoided capacity rate is $30/MWh, applying a PAF of 1.05 would increase the rate to $31.50/MWh, or increasing the amount paid to the QF for capacity by 5%.

Q. DOES THE COMPANIES' AVOIDED CAPACITY PAYMENT RATE DESIGN PROVIDE APPROPRIATE PRICE SIGNALS TO ENCOURAGE QF DEVELOPMENT AND APPROPRIATELY PAY QFS FOR THE CAPACITY VALUE THAT THEY PROVIDE?

A. Yes. The avoided capacity payment rate design provides appropriate price signals and incentives for QFs to maximize output during times when capacity has the most value to the Companies' customers.

IV. AVOIDED ENERGY COST CALCULATION AND RATE DESIGN METHODOLOGY

Q. IN GENERAL TERMS, HOW ARE AVOIDED ENERGY COSTS CALCULATED UNDER THE PEAKER METHODOLOGY?

A. In any given hour, a utility will have a variety of units online such as hydro-electric, nuclear, natural gas combined-cycle, coal, natural gas simple-cycle CTs and diesel fuel oil CT resources. These units all have differing variable fuel and operating costs that are used to dispatch them in economic merit order to meet the utility's instantaneous load obligations. The peaker methodology credits the QF for avoiding the variable energy costs from the most expensive unit, otherwise known as the marginal unit. To calculate the marginal energy value, two production cost simulations are performed using IRP models and current market assumptions. The first simulation establishes the "base case" variable production costs associated with operating the system over the ten-year avoided cost period. The second simulation is identical to the first with the exception of the addition of 100 MW of no-cost generation available to the system in every hour of the ten-year period. Comparing the total production cost associated with the base case relative to the second simulation with the 100 MW of no-cost generation presents a delta from which the marginal production savings can be derived.

Q. PLEASE EXPAND ON HOW THE AVOIDED MARGINAL ENERGY COSTS ARE DERIVED.

A. Since the utility commits and dispatches its generation units in an economic merit order, comparing the base case simulation previously described to the second case with 100 MW of no-cost generation results in the marginal variable production cost savings attributable to 100 MW of incremental no-cost generation. Compared to the base case simulation, the 100 MW of no-cost generation will show savings resulting from reduced fuel consumption, reduced environmental allowance costs and reduced VOM costs. These nominal cost savings can then be converted to a dollar per MWh value by dividing the savings in any given time period by the number of hours in that period, multiplied by the 100 MW output of the unit. Once nominal avoided costs are determined over the ten-year avoided cost period they are then levelized by time period to produce the avoided energy rate in cents per kWh.

Q. PLEASE DESCRIBE THE CHANGES THE COMPANIES INCORPORATED IN THE ENERGY RATE DESIGN COMPARED TO THE PRE-EXISTING RATE DESIGN.

A. As previously mentioned, the Companies' recent experience as significant solar generation has been installed on the Companies' systems is that a solar profile is not coincident with peak load, and therefore lacks coincidence with the Companies' highest marginal cost hours in both winter and summer. As a result, under the pre-existing rate design, QFs were over-credited for energy during the significantly broader on-peak hours. To address these concerns, the Companies developed more granular avoided energy rate designs that more precisely and accurately recognize the hourly value of QF energy to DEC and DEP and their customers.

The new Schedule PP avoided energy rate design designates five distinct energy pricing periods to better recognize each utility's discrete production costs throughout the day, as well as differences in summer and non-summer peak periods. This design provides more granularity than the pre-existing Schedule PP rate design, which only offered broad, on-peak and off-peak pricing. The new Schedule PP rate design more appropriately compensates QFs for the avoided energy value they create for customers. The five energy pricing periods and their respective prices are shown in Figure 4 below.

Figure 4: Avoided Energy Rate Design Pricing Periods[17]

Filed Energy Rates

Independent Energy Price Blocks	1) Summer On Peak Energy		2) Non-Summer AM On Peak Energy		3) Non-Summer PM On Peak Energy		4) Summer Off Peak Energy		5) Non-Summer Off Peak Energy	
Company	DEC	DEP	DEC	DEP	DEC	DEP	DEC	DEP	DEC	DEP
Rate (cents/KWH)	4.00	3.31	4.31	3.78	3.87	3.40	2.64	2.71	2.66	2.49

DEC Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (May - Sep)	4) Summer Off Peak Energy												(1) Summer On Peak Energy											(4) Off
Non-Summer (Oct - Apr)	(5) Non-Summer Off Peak Energy						(2) Non-Sum AM On Peak Energy				(5) Non-Summer Off Peak Energy							(3) Non-Summer PM On Peak Energy						(5) Off

DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (May - Sep)	4) Summer Off Peak Energy													(1) Summer On Peak Energy										
Non-Summer (Oct - Apr)	(5) Non-Summer Off Peak Energy					(2) Non-Sum AM On Peak Energy				(5) Non-Summer Off Peak Energy								(3) Non-Summer PM On Peak Energy						

Prior Energy Rates

Independent Energy Price Blocks	(1) On Peak Energy		(2) Off Peak Energy	
Company	DEC	DEP	DEC	DEP
Rate (cents/KWH)	5.04	4.71	4.09	4.15

DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun - Sep)	(2) Off Peak Energy													(1) On Peak Energy								(2) Off Peak Energy		
Non-Summer (Oct - May)	(2) Off Peak Energy						(1) On Peak Energy							(2) Off Peak Energy										

[17] Snider DEC/DEP Exhibit 8 provides a larger version of Figure 4 for readability purposes.

Each of the five pricing periods has its own independent price to more accurately reflect the value of QF energy during the different periods. The on-peak pricing periods were selected because they represent hours with above-average "net load" requirements, which coincide with the Companies' higher marginal energy costs during these periods. The five pricing periods also vary slightly for DEC and DEP to account for the differences in each utility's load profile net of solar generation.

Q. DID THE COMPANIES INCLUDE A TRANSMISSION SYSTEM LINE LOSS CREDIT FOR QFS?

A. Yes. The Companies' avoided cost calculations continue to recognize distribution-connected QF generation's avoidance of transmission system line losses, and therefore, the Schedule PP rates continue to include avoided energy and capacity line loss credits.

Q. DO THE COMPANIES INCLUDE AVOIDED ENVIRONMENTAL COSTS IN THE DEVELOPMENT OF THE AVOIDED ENERGY COST RATES?

A. Yes. As mentioned previously, the Companies' avoided energy cost rates include avoided emission control reagents and allowance costs for SO_2 and NO_x, as well as ash handling and disposal costs based upon the costs actually avoided by the utility. Consistent with PURPA, the Companies have not included more speculative costs, such as avoided CO_2 that are not actually being avoided by the utility.[18]

Q. DO THE COMPANIES' AVOIDED ENERGY RATE DESIGNS PROVIDE APPROPRIATE PRICE SIGNALS TO ENCOURAGE QF DEVELOPMENT AND

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[18] *See Order on Requests for Reconsideration, S. California Edison Co. San Diego Gas & Elec. Co.,* 71 FERC ¶ 61,269, 62,080 (1995); *see also California Pub. Utilities Comm'n S. California Edison Co. Pac. Gas & Elec. Co. San Diego Gas & Elec. Co*., 133 FERC ¶ 61059, 61261, at fn. 52 (Oct. 21, 2010).

APPROPRIATELY PAY QFS FOR THE ENERGY VALUE THAT THEY PROVIDE?

A. Yes. The avoided energy payment rate designs provide appropriate price signals and incentives for QFs to maximize output during times when energy has the most value to the Companies and their customers.

VII. INTEGRATION SERVICES CHARGE ASSOCIATED WITH INTERMITTENT SOLAR GENERATION

Q. DID THE COMPANIES INCLUDE ANY ADJUSTMENTS TO THE AVOIDED COST RATES FILED IN THIS PROCEEDING TO ACCOUNT FOR MEASURABLE COSTS OF INTEGRATING INTERMITTENT SOLAR QF POWER?

A. Yes, as I previously mentioned, the Companies included a specific measurable integration services charge for intermittent solar generation.

Q. PLEASE EXPLAIN HOW INTEGRATING INTERMITTENT SOLAR RESOURCES IMPACTS THE OPERATIONS OF THE GENERATION SYSTEM.

A. To meet the Companies' obligation to provide reliable electric service to their respective customers, DEC and DEP must dispatch their generation fleet resources to meet real-time load on a moment-to-moment basis. The energy output from solar resources is variable; it can unexpectedly and rapidly drop-off or ramp-up in real-time, thereby increasing uncertainty in day-ahead, hourly, and sub-hourly projections for fleet operations. This additional uncertainty and volatility requires the Companies to carry additional operating reserves, which are the real-time system resources required to balance and regulate the system on an hourly and sub-hourly basis. These operating reserves are provided by reserving additional dispatchable conventional fleet resources to ensure that sufficient operational flexibility is available to respond in real-time to rapid changes in solar output. Additionally, ensuring that sufficient operating reserves are available is also required to maintain compliance with NERC bulk electric system balancing and reliability standards. The need for increased real-time system operating reserves to reliably integrate increased levels of uncontrolled solar generation results in additional operating costs relative to a dispatchable or baseload generation source.

Q. HOW DID THE COMPANIES QUANTIFY THE INCREASED OPERATING COSTS THAT THEY INCUR TO RELIABLY INTEGRATE THE UNCONTROLLED SOLAR QF GENERATION ON THEIR RESPECTIVE SYSTEMS THAT YOU DESCRIBE ABOVE?

A. In late 2017, the Companies commissioned Astrapé Consulting to analyze the impacts of integrating solar into the utilities' systems at varying solar penetration levels and to quantify the cost of utilizing the DEC and DEP fleets to provide the additional operating reserves or generation "ancillary services" needed to reliably integrate the various levels of intermittent solar generation. Mr. Nick Wintermantel of Astrapé Consulting is testifying in this proceeding as an expert witness and his testimony reviews the methodology and results of the Solar Ancillary Service Study conducted for DEC and DEP.

Q. WHAT FACTORS INFLUENCE THE INTEGRATION COSTS FOR THE DEC AND DEP SYSTEMS?

A. As discussed in DEC/DEP witness Wintermantel's testimony, the cost to carry additional ancillary services required to reliably integrate solar generation into a utility's system is driven by several factors. In general terms, these factors include the characteristics and make-up of dispatchable generation resources within a utility's existing system, the underlying cost of the fossil fuels used by those resources, the nature of the utility's load profile and the amount of solar resources on the system.

Q. PLEASE GENERALLY DESCRIBE THE PENETRATION LEVELS OF SOLAR STUDIED.

A. As discussed above, both Companies already have a significant amount of solar installed on their systems. In addition to studying a baseline basement of 0 MW of installed solar, Astrapé evaluated solar penetration levels based on the expected amounts of solar that are already operating or will be interconnected to the Companies' systems pursuant to existing renewable energy programs (such as Act 236 and PURPA purchases) and the first tranche of DEC's and DEP's large North Carolina competitive procurement of renewable energy or "CPRE" program as well as other solar programs (large customer Green Source program and community solar) pursuant to North Carolina House Bill 589 enacted in 2017. As further discussed by DEC/DEP witness. Wintermantel and identified in the Solar Ancillary Service Study, solar penetrations that the Companies requested Astrapé study included "Existing plus Transition," "Tranche 1," and "+1,500 MW" of installed solar. The "Existing plus Transition" reflects projected solar installations in DEC (840 MW) and DEP (2,950) expected to be installed by the 2020 study year. The Companies next assessed "Tranche 1" penetration levels of 1,520 MW in DEC and 3,110 in DEP. The "+1,500 MW" penetration level (3,020 MW in DEC and 4,610 MW in DEP) was studied to assess a potential, future high penetration scenario. These capacity levels were selected to allow the ancillary service impacts to be measured across a broad range of solar penetration.

Q. WHAT ARE THE VALUES FOR THE INTEGRATION SERVICES CHARGES INCLUDED IN YOUR AVOIDED COST RATES FOR DEC AND DEP?

A. Separate solar integration services charges are included in Schedule PP for DEC and DEP, respectively. For DEC the charge is $1.10/MWh. For DEP, the charge is $2.39/MWh.

Q. WILL THE INTEGRATION SERVICES CHARGES BE UPDATED?

A. Yes. The integration services charge within a solar provider's contract will be updated biennially at each avoided cost proceeding. This will allow for the uniform application of the charge and will account for changes in market factors impacting the cost of integration over time.

Q. WHICH SOLAR GENERATORS WILL INCUR THE SOLAR INTEGRATION SERVICES CHARGE?

A. As it relates to this proceeding, all solar QFs selling power to DEC and DEP under the Schedule PP avoided cost rates filed in this proceeding will be subject to this integration services charge. The Companies are not proposing to apply this charge retrospectively to existing solar resources or to those solar resources that have established contracts under previously-authorized long-term fixed rates. As existing contracts with solar QFs expire, however, any new solar contracts, or contract renewals, would include such a provision. As such, the Companies plan to update the integration services charge as a normal part of future avoided cost filings to account for changes in the previously-mentioned factors, such as solar penetration levels, prevailing fuel prices and the makeup of the Companies' future resource portfolios. Thus, over time, as existing contracts expire and new contracts are executed, this average integration services charge will apply to all solar providers uniformly.

Q. HOW ARE THE COMPANIES' CUSTOMERS IMPACTED IF INTEGRATION COSTS ARE NOT CHARGED TO SOLAR QFS INCLUDED IN THE AVOIDED COST TARIFF?

A. If an adjustment is not made to the avoided cost tariff to account for these specific operational costs driven by the integration of intermittent solar resources, then the Companies' customers bear this cost, which is recovered in the annual fuel cost proceeding. Failure to properly charge these costs to the cost causer – *i.e.*, the intermittent solar QF – would unfairly burden the Companies' customers with increased costs and would violate the ratepayer indifference objective underlying PURPA.

Q. DO YOU BELIEVE THAT THE INTEGRATION SERVICES CHARGE IS FAIR TO THE SOLAR QF GENERATORS AND THE COMPANIES' CUSTOMERS?

A. Yes. I believe that the integration services charge properly attributes these costs to the appropriate cost causer, as opposed to imposing additional costs on the Companies' customers, and that the Companies' have reasonably and fairly implemented the charge to intermittent solar QFs on a prospective basis.

VIII. MODIFICATIONS TO THE PURCHASED POWER AGREEMENT AND TERMS AND CONDITIONS UNDER THE PURCHASED POWER SCHEDULE PP

Q. HAVE THE COMPANIES PROPOSED CHANGES TO THEIR SCHEDULE PP PURCHASE POWER AGREEMENT AND THE ASSOCIATED TERMS AND CONDITIONS?

A. Yes. As discussed further below, the Companies are modifying certain provisions of DEC's and DEP's standard Schedule PP PPA and Terms and Conditions in response to their experiences with significant QF development under Schedule PP.

Q. PLEASE BRIEFLY DESCRIBE THE SUBSTANTIVE CHANGES THE COMPANIES HAVE MADE TO THE PRO FORMA SCHEDULE PP PPA.

A. The Companies are making three modifications to the Schedule PP PPA. First, the Companies are amending Section 1.4, which establishes the "Contract Capacity" of the QF, based upon the estimated amount of annual energy production that "the Seller contracts to deliver to the Company." This amount is agreed upon and fixed at the time the PPA is executed. The Companies have modified Section 1.4 to clarify that QFs are not permitted to add additional capacity or other equipment to the operating QF that would increase the direct current ("DC") or alternating current ("AC") output of the generating facility, as such increase can cause a change to the agreed upon "Contract Capacity." As discussed in the Companies' Application, this clarifying change is necessary to avoid future disputes over the Contract Capacity being delivered by the QF, and to mitigate the risk to customers of overpaying QFs for additional energy at rates exceeding the utility's then-current avoided cost rates.

Secondly, Section 3, "Initial Delivery Date" of the PPA is revised to clarify that a Seller must contract for a minimum term of five (5) years, where the Seller contracts to receive capacity payments. Variable rate QF sellers are not eligible for capacity payments. Third, the Companies have modified the Section 5, "Reporting Requirements," to provide the Companies the right to request annual, monthly and day-ahead reporting of forecasted generator output from QFs selling their output under Schedule PP. Previously, this section applied to facilities larger than 3,000 kW, which now exceeds the eligibility limit for Schedule PP. While the Companies do not require smaller QFs selling power under Schedule PP to provide this type of reporting today, such reporting may be necessary and beneficial to the Companies' operation of the grid in the future as additional QF solar is added to the distribution and transmission systems. These changes are illustrated in my Exhibits 4 and 5.

Q. PLEASE BRIEFLY DESCRIBE THE SUBSTANTIVE CHANGES THE COMPANIES HAVE MADE TO THE SCHEDULE PP TERMS AND CONDITIONS.

A. The Companies are making several changes to the Schedule PP Terms and Conditions to aid administration and clarify the Company's and Seller's obligations under the Schedule PP PPA. These changes are as follows:

1. Paragraph 1(e) is revised to clarify that a QF owner or "Seller" under Schedule PP may not transfer or assign their existing PPA to another Schedule PP Seller that is located within one-half mile of the original Seller. . This amendment is intended to prevent evasion of the pre-existing geographic restriction through later consolidation of ownership of QFs after their Schedule PPAs have been executed.
2. Paragraph 1(i) is revised to add that a material modification to a facility impacting the agreed-upon Contract Capacity as stated in the PPA without prior consent by the Company is grounds for default and termination of the PPA. This change relates to the first clarification to the terms of the PPA that I discuss above.
3. Paragraph 2(b) is revised to clarify that QFs delivering power under Schedule PP must comply with any Duke Energy system operator instructions and operational protocols

for dispatching generation (or battery storage) output on to the system. These system operator instructions are in addition to any applicable operating guidelines established by the NERC or SERC.

4. Paragraph 3(a) is revised to clarify that the nameplate capacity of the Seller's facility shall be provided on both an AC and DC basis, consistent with the first clarification to the PPA that I discuss above.
5. Paragraph 4(a) is revised to clarify that the Contract Capacity in the PPA should not exceed the agreed-upon capacity specified in the corresponding Interconnection Agreement. This paragraph is also revised for consistency with the changes proposed to paragraph 1(i), to clarify that the Contract Capacity and annual energy production should not exceed the agreed-upon capacity established in the PPA.
6. Paragraph 6(b) is revised to clarify that an amendment to the PPA or a new agreement is required before the Contract Capacity is exceeded by the Seller.
7. Paragraph 8(e) is modified to require the Seller to provide reasonable written notice prior to any requested material change to the Seller's facility, in order to allow the Company time to accommodate any required changes to the facility.
8. Paragraph 13 is updated to identify the current South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections ("SC GIP"). The remainder of this paragraph only applies in limited circumstances when a QF Seller is not subject to the Commission-approved SC GIP.
9. Paragraph 14 is revised to better describe the circumstances that are considered "an emergency condition" impacting the delivery or receipt of electricity supplied by the

Seller. These circumstances expressly include any circumstance that requires action by the Companies to comply with NERC/SERC regulations or standards.

The majority of these revisions to the Terms and Conditions are being proposed to align the changes made in the Schedule PP PPA to the Terms and Conditions, or are designed to clarify the currently-approved Schedule PP Terms and Conditions. The above-described revisions are illustrated in my Exhibits 6 and 7.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

SCHEDULE PP (SC)
PURCHASED POWER

AVAILABILITY (South Carolina Only)
Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below)~~-~~ to the Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not applicable to a Qualifying Facility owned by a Customer, or affiliate or partner of a Customer, who sells power to the Company from another facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than two (2) megawatts.

Service necessary for the delivery of power from the Seller's generating facilities into the Company's system shall be furnished solely to the individual contracting Customer in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to the Company's purchase of energy or energy and capacity from the Customer's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with the Company's system. Power delivered to the Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of the Company, in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long~~-~~-Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving the avoided cost rates set forth below, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner.

Sellers not qualifying for the Fixed Long~~-~~-Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long~~-~~-Term Credit rates proposed in the next avoided cost proceeding, which will be subject to adjustment if different rates are approved by the Public Service Commission of South Carolina ("Commission") in that proceeding.

Qualifying Facilities Eligible for Capacity and/or Energy Credits
In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of two (2) megawatts or less, based on the nameplate rating of the generator, which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution systems. Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "RATE" section of this schedule.

TYPE OF SERVICE
The Company will furnish 60 Hertz service through one metering point, at one delivery point, at one of the following approximate voltages, where available, upon mutual agreement:

Single-phase, 120 or 240 volts; or
3-phase, 3-wire, 240, 480, 4160, 12470, or 24940 volts; or
3-phase voltages other than the foregoing, but only at the Company's option, and provided that the size of the Customer's contract warrants a substation solely to serve that Customer, and further provided that the Customer furnish suitable outdoor space on the premises to accommodate a ground-type transformer installation, or substation, or a transformer vault built in accordance with the Company's specifications.

The type of service under this Schedule shall be determined by the Company. Prospective customers shall ascertain the available voltage by written inquiry of the Company before purchasing equipment.

SCHEDULE PP (SC)
PURCHASED POWER

RATE

The Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to the Company at the Credits set forth below as applicable. Such payments shall be reduced by ~~both~~ the Administrative Charge, the Integration Services Charge and any applicable Interconnection Facilities Charge.

Energy and Capacity Credits

Eligible Qualifying Facilities eligible for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credits will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement.

Administrative Charge	$ 11.07 per month
Interconnection Charge	The Interconnection Charge for each customer is set forth in the Agreement as outlined in the Terms and Conditions; however, the $25.00 minimum will not apply if the charge is for a meter only.
Integration Services Charge	$0.00110 per kWh

Due to incremental operations costs incurred with intermittent generation resources, Seller shall pay an integration services charge (the "Integration Services Charge"), which currently applies only to solar photovoltaic generation facilities. The Charge shall apply to solar photo-voltaic Eligible Qualifying Facilities that either establish a Legally Enforceable Obligation or renew, or otherwise extend, a Purchased Power Agreement on or after November 30, 2018, including all Sellers served under Variable rates. This Integration Services Charge shall be in the amount specified below and will be billed monthly based upon generated energy delivered to the Company.

~~Interconnected to Distribution System:~~

	~~Variable Rate~~	~~5-Year Fixed Rate~~	~~10-Year Fixed Rate~~
~~I. Capacity Credit~~			
~~a. All On-Peak Energy per Summer Month per kWh:~~	~~6.11¢~~	~~6.33¢~~	~~6.68¢~~
~~b. All On-Peak Energy per Nonsummer Month per kWh:~~	~~2.37¢~~	~~2.45¢~~	~~2.58¢~~
~~II. Energy Credit~~			
~~a. All On-Peak Energy per Month per kWh~~	~~4.24¢~~	~~4.46¢~~	~~5.04¢~~
~~b. All Off-Peak Energy per Month per kWh~~	~~3.34¢~~	~~3.49¢~~	~~4.09¢~~

~~Interconnected to Transmission System:~~

	~~Variable Rate~~	~~5-Year Fixed Rate~~	~~10-Year Fixed Rate~~
~~I. Capacity Credit~~			
~~a. All On-Peak Energy per Summer Month per kWh:~~	~~5.97¢~~	~~6.18¢~~	~~6.52¢~~
~~b. All On-Peak Energy per Nonsummer Month per kWh:~~	~~2.31¢~~	~~2.39¢~~	~~2.52¢~~
~~II. Energy Credit~~			
~~a. All On-Peak Energy per Month per kWh~~	~~4.14¢~~	~~4.35¢~~	~~4.92¢~~
~~b. All Off-Peak Energy per Month per kWh~~	~~3.26¢~~	~~3.42¢~~	~~4.00¢~~

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)

SCHEDULE PP (SC)
PURCHASED POWER

Energy Credits (¢/kWh)[1]:

a. On-peak kWh - Summer	3.66	3.69	4.00	3.54	3.57	3.87
On-peak kWh - NonSummer						
1. Morning Hours	4.17	4.12	4.31	4.07	4.02	4.20
2. Evening Hours	3.95	3.80	3.87	3.87	3.71	3.79
b. Off-peak kWh - Summer	2.93	2.63	2.64	2.88	2.58	2.59
Off-peak kWh - NonSummer	2.78	2.65	2.66	2.73	2.61	2.62

Capacity Credits (¢/kWh)[2]:

On-~~P~~peak kWh – Winter Morning	0.00	0.00	0.97	0.00	0.00	0.94
On-peak kWh – Winter Evening	0.00	0.00	0.31	0.00	0.00	0.31
On-peak kWh - Summer	0.00	0.00	0.21	0.00	0.00	0.20

[1] For Energy Credit purposes, Summer months are defined as calendar months May through September and NonSummer months are defined as calendar months October through April. Summer on-peak hours shall be Monday through Friday from 12:00 p.m. noon to 11:00 p.m. NonSummer on-peak hours shall be Monday through Friday with morning hours from 6:00 a.m. to 10:00 a.m. plus evening hours from 5:00 p.m. to 11:00 p.m. All other hours, plus the following holidays, shall be off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When a holiday falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

[2] Capacity Credit shall only be applicable in Summer months defined as the calendar months of July and August and Winter months defined as calendar months of December through March. Summer on-peak hours shall be 4 p.m. to 8 p.m. during all Summer days. During Winter months, the morning on-peak hours shall be all Winter days from 6:00 a.m. to 9:00 a.m. and evening on-peak hours shall be all Winter days from 6:00 p.m. to 9:00 p.m. Capacity credits are not applicable in all other months.

The Capacity Credits and Energy Credits of the Variable Rate are subject to change at any time during the term of contract as approved by the Public Service Commission of South Carolina.

~~DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS~~

	~~Summer Months~~	~~Nonsummer Months~~
	~~June 1 – September 30~~	~~October 1 – May 31~~
~~On-Peak Period Hours~~	~~1 p.m. – 9 p.m.~~	~~6 a.m. – 1 p.m.~~
	~~Monday – Friday~~	~~Monday – Friday~~
~~Off-Peak Period Hours~~	~~All other weekday hours and all Saturday and Sunday hours.~~ ~~All hours for the following holidays shall be considered as Off Peak: New Year's Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving, and Christmas Day.~~	

RENEWABLE ENERGY CREDITS
Unless otherwise specified in the Company's agreements with the Seller, the sale of power under this schedule does not convey to the Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

INTERCONNECTION FACILITIES CHARGE
For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the $25

minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of the Seller's generation to the Company's system shall be in accordance with the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections.

POWER FACTOR CORRECTION
Unless the Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when the Seller consumes VARs supplied by the Company or the Seller delivers VARs to Company, the Company may reduce the purchased energy measured in kilowatt-hours for that month by multiplying by the Average Consumed Power Factor. The Average Consumed Power Factor shall be the calculated on a monthly basis as the average kWh divided the average kVAh, where average kVAh shall be the square root of the sum of the average kWh squared plus the average consumed and delivered kVARh squared. Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of Company.

RATE UPDATES
The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings.

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions.

CONTRACT CAPACITY
The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

PAYMENTS
Credit billings to the Customer will be credited to the Customer's account, ~~-~~or, at the option of the Customer and upon ten (10) days' prior written notice, shall be payable to the Customer within fifteen (15) days of the date of the bill.

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one and one-half percent (1 ½%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

CONTRACT PERIOD
Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

SOUTH CAROLINA POWER EXCISE TAX
The Customer shall be responsible for any and all taxes including, but not limited to, the Electric Power Excise Tax for the electric power generated by the Customer's facilities, which may be imposed under S.C. Code Ann. §12-23-10 (1976), as amended, or any equivalent statute or regulations.

AVAILABILITY (South Carolina Only)

Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below) to the Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not applicable to a Qualifying Facility owned by a Customer, or affiliate or partner of a Customer, who sells power to the Company from another facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than two (2) megawatts.

Service necessary for the delivery of power from the Seller's generating facilities into the Company's system shall be furnished solely to the individual contracting Customer in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to the Company's purchase of energy or energy and capacity from the Customer's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with the Company's system. Power delivered to the Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of the Company, in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long-Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving the avoided cost rates set forth below, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner.

Sellers not qualifying for the Fixed Long-Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long-Term Credit rates proposed in the next avoided cost proceeding, which will be subject to adjustment if different rates are approved by the Public Service Commission of South Carolina ("Commission") in that proceeding.

Qualifying Facilities Eligible for Capacity and/or Energy Credits

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of two (2) megawatts or less, based on the nameplate rating of the generator, which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution systems. Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "RATE" section of this schedule.

TYPE OF SERVICE

The Company will furnish 60 Hertz service through one metering point, at one delivery point, at one of the following approximate voltages, where available, upon mutual agreement:

Single-phase, 120 or 240 volts; or
3-phase, 3-wire, 240, 480, 4160, 12470, or 24940 volts; or
3-phase voltages other than the foregoing, but only at the Company's option, and provided that the size of the Customer's contract warrants a substation solely to serve that Customer, and further provided that the Customer furnish suitable outdoor space on the premises to accommodate a ground-type transformer installation, or substation, or a transformer vault built in accordance with the Company's specifications.

The type of service under this Schedule shall be determined by the Company. Prospective customers shall ascertain the available voltage by written inquiry of the Company before purchasing equipment.

RATE

The Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to the Company at the Credits set forth below as applicable. Such payments shall be reduced by the Administrative Charge, the Integration Services Charge and any applicable Interconnection Facilities Charge.

Energy and Capacity Credits

Eligible Qualifying Facilities eligible for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credits will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement.

Administrative Charge	$ 11.07 per month
Interconnection Charge	The Interconnection Charge for each customer is set forth in the Agreement as outlined in the Terms and Conditions; however, the $25.00 minimum will not apply if the charge is for a meter only.
Integration Services Charge	$0.00110 per kWh

Due to incremental operations costs incurred with intermittent generation resources, Seller shall pay an integration services charge (the "Integration Services Charge"), which currently applies only to solar photovoltaic generation facilities. The Charge shall apply to solar photo-voltaic Eligible Qualifying Facilities that either establish a Legally Enforceable Obligation or renew, or otherwise extend, a Purchased Power Agreement on or after November 30, 2018, including all Sellers served under Variable rates. This Integration Services Charge shall be in the amount specified below and will be billed monthly based upon generated energy delivered to the Company.

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)
Energy Credits (¢/kWh)[1]:						
a. On-peak kWh - Summer	3.66	3.69	4.00	3.54	3.57	3.87
On-peak kWh - NonSummer						
1. Morning Hours	4.17	4.12	4.31	4.07	4.02	4.20
2. Evening Hours	3.95	3.80	3.87	3.87	3.71	3.79
b. Off-peak kWh - Summer	2.93	2.63	2.64	2.88	2.58	2.59
Off-peak kWh - NonSummer	2.78	2.65	2.66	2.73	2.61	2.62
Capacity Credits (¢/kWh)[2]:						
On-peak kWh – Winter Morning	0.00	0.00	0.97	0.00	0.00	0.94
On-peak kWh – Winter Evening	0.00	0.00	0.31	0.00	0.00	0.31
On-peak kWh - Summer	0.00	0.00	0.21	0.00	0.00	0.20

[1] For Energy Credit purposes, Summer months are defined as calendar months May through September and NonSummer months are defined as calendar months October through April. Summer on-peak hours shall be Monday through Friday from 12:00 p.m. noon to 11:00 p.m. NonSummer on-peak hours shall be Monday through Friday with morning hours from 6:00 a.m. to 10:00 a.m. plus evening hours from 5:00 p.m. to 11:00 p.m. All other hours, plus the following holidays, shall be off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When a holiday falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

[2] Capacity Credit shall only be applicable in Summer months defined as the calendar months of July and August and Winter months defined as calendar months of December through March. Summer on-peak hours shall be 4 p.m. to 8 p.m. during all Summer days. During Winter months, the morning on-peak hours shall be all Winter days from 6:00 a.m. to 9:00 a.m. and evening on-peak hours shall be all Winter days from 6:00 p.m. to 9:00 p.m. Capacity credits are not applicable in all other months.

The Capacity Credits and Energy Credits of the Variable Rate are subject to change at any time during the term of contract as approved by the Public Service Commission of South Carolina.

RENEWABLE ENERGY CREDITS

Unless otherwise specified in the Company's agreements with the Seller, the sale of power under this schedule does not convey to the Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

INTERCONNECTION FACILITIES CHARGE

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the $25 minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of the Seller's generation to the Company's system shall be in accordance with the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections.

POWER FACTOR CORRECTION

Unless the Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when the Seller consumes VARs supplied by the Company or the Seller delivers VARs to Company, the Company may reduce the purchased energy measured in kilowatt-hours for that month by multiplying by the Average Consumed Power Factor. The Average Consumed Power Factor shall be the calculated on a monthly basis as the average kWh divided the average kVAh, where average kVAh shall be the square root of the sum of the average kWh squared plus the average consumed and delivered kVARh squared. Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of Company.

RATE UPDATES

The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings.

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions.

CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

PAYMENTS

Credit billings to the Customer will be credited to the Customer's account, or, at the option of the Customer and upon ten (10) days' prior written notice, shall be payable to the Customer within fifteen (15) days of the date of the bill.

Bills under this Schedule are due and payable on the date of the bill at the office of the Company. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a one and one-half percent (1 ½%) late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

CONTRACT PERIOD

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

SOUTH CAROLINA POWER EXCISE TAX

The Customer shall be responsible for any and all taxes including, but not limited to, the Electric Power Excise Tax for the electric power generated by the Customer's facilities, which may be imposed under S.C. Code Ann. §12-23-10 (1976), as amended, or any equivalent statute or regulations.

Testimony of Glen A. Snider
Confidential Exhibit 3

Duke Energy Carolinas, LLC

Supporting Calculations
(filed under seal)

PURCHASED POWER AGREEMENT

between

DUKE ENERGY CAROLINAS, LLC

and

~~CUSTOMER~~SELLER NAME

"Project Name"

Contract Number: ______________________________

Contract Date: ______________________________

Initial Delivery Date: ______________________________

PURCHASED POWER AGREEMENT

THIS PURCHASED POWER AGREEMENT (“Agreement”) is made this____day of_____, by and between

DUKE ENERGY CAROLINAS, LLC,

a South Carolina Limited Liability Company (“Company”), and

________________________________~~CUSTOMER NAME~~ *[insert seller name]*

a(n) *[insert place of formation] [insert entity type]*
(“~~Supplier~~Seller” ~~or “Customer”~~), for the

“____________________________________,” ~~“~~Project ~~Name”,~~

~~which is or will be a qualifying facility~~Seller hereby certifies that the Facility (is/is not) “new capacity,” as defined by the Federal Energy Regulatory Commission (“FERC”), and that construction of the Facility (was/was not) commenced on or after November 9, 1978 and that the Facility is a qualifying facility as defined by the Federal Energy Regulatory Commission (“FERC”) pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. ~~,~~ The Facility as defined herein (the “Facility”) shall ~~consisting~~consist of that certain *[insert description of the Facility including fuel type and Nameplate Capacity rating in AC and DC]* ____________________________________ ~~generator (the “Facility”)~~which is located at *[insert facility address]*. ____, ~~South Carolina.~~

(Hereinafter, the parties are also referred to individually as a “Party” and collectively as the “Parties”).

In consideration of the mutual covenants herein contained, the Parties hereto, for themselves, their successors and assigns, do hereby agree to the following:

1. **Service Requirements**

1.1 Seller shall sell and deliver exclusively to the Company all of the electric power generated by the Facility, net of the Facility’s own auxiliary electrical requirements and the Company shall purchase, receive, use and pay for the same, subject to the conditions contained in this Agreement. Upon the completion of the installation, by Company, of its system upgrades and interconnection facilities at the point of delivery of Seller’s and Company’s conductors, Seller shall become responsible for the payment to Company of any and all charges that may apply, whether or not Seller actually delivers any electricity to Company. If the Seller requests standby, back-up and/or maintenance power for the Facility’s auxiliary electrical requirements from the Company, such power shall be provided to Supplier pursuant to a separate electric service agreement under the Company’s rate schedule appropriate for such service.

1.2 Electricity supplied by the ~~s~~Seller shall be [*single (1)/three (3)*] phase, alternating~~,~~ at a frequency of approximately sixty (60) hertz, and at approximately ______volts,~~________,~~ ______ wires at a sufficient power factor to maintain system operating parameters as specified by Company.

1.3 Delivery of said Seller's Power shall be at a point of delivery described as follows: ____.

1.4 ~~Based upon the alternating current rating, t~~The Contract Capacity of ~~Seller's generating facilities~~the Facility, as defined in the Terms and Conditions for the Purchase of Electric Power is ______-AC kW/MW. ~~and~~The estimated annual energy production of the Facility is ____________kWh.~~ is the amount Seller contracts to deliver to Company and Company agrees to receive.~~

2. **Rate Schedule**

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with all the terms and conditions of the Company's Purchased Power Schedule PP(SC), *[Variable Rate][5-year Fixed Long-Term Rate], [10-year Fixed Long-Term Rate] for [Distribution][Transmission] Interconnection]* ("Rate Schedule") and the Terms and Conditions~~,~~ for the Purchase of Electric Power, both of which are now on file with the Public Service Commission of South Carolina~~,~~ ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), Integration Services Charge, and all non-rate provisions.

3. **Initial Delivery Date**

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company, unless otherwise mutually agreed to by the Parties, and continuing for the term specified in the Rate schedule paragraph above and shall automatically extend unless terminated by either party by giving not less than thirty (30) days prior written notice. ~~The~~Any automatic extension of this Agreement will be at the Variable Rates in effect at the time of extension. Unless otherwise mutually agreed to by the Parties, ~~T~~the term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be _____________, 20__. Company at its sole discretion may terminate this Agreement on _____________, 20__ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner) if Seller is unable to provide generation capacity and energy production consistent with the energy production levels specified in Provision No. ~~2~~1.4 above.~~ This date may be extended by upon mutual agreement by both parties.~~

4. **Interconnection Facilities**

Unless otherwise required by Company, an Interconnection ~~a~~Agreement pursuant to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections~~to interconnect~~ shall be executed by Seller, including any applicable payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. *(Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a)* The Interconnection Facilities Charge shall be specified in the Interconnection Agreement, or *(b)* The Interconnection Facilities Charge shall be 1.7% of the installed cost of metering and other equipment and is $____ per month.

5. **Reporting Requirements**

Upon request, facilities~~ larger than 3,000 kW~~ may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the ~~acceptance hereof~~execution by Company and Seller, ~~evidenced by the signature of its Presidents, Vice Presidents or Authorized Representatives~~ in the block provided below, this ~~document~~Agreement together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and ~~declared~~delivered to Company by Seller from ~~its~~the above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:

____

Printed: ______________________

____

Printed: ______________________

____________________________________, **Seller**

By ____

Printed: ____________________________________

Title ______________________________________

This _____ day of ____________________, 20___

ACCEPTED: DUKE ENERGY CAROLINAS, LLC **Mail Payment/Bill to:**

By _____________________________

Title ___________________________

This _____ day of __________, 20 ____

____

____

____

PURCHASED POWER AGREEMENT

between

DUKE ENERGY CAROLINAS, LLC

and

SELLER NAME

"Project Name"

Contract Number: ______________________________

Contract Date: ______________________________

Initial Delivery Date: ______________________________

PURCHASED POWER AGREEMENT

THIS PURCHASED POWER AGREEMENT ("Agreement") is made this____day of_____, by and between

DUKE ENERGY CAROLINAS, LLC,

a South Carolina Limited Liability Company ("Company"), and

_________________________________ *[insert seller name]*

a(n) *[insert place of formation] [insert entity type]* ("Seller"), for the

"___________________________________," Project

Seller hereby certifies that the Facility (is/is not) "new capacity," as defined by the Federal Energy Regulatory Commission ("FERC"), and that construction of the Facility (was/was not) commenced on or after November 9, 1978 and that the Facility is a qualifying facility as defined by the Federal Energy Regulatory Commission ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978. The Facility as defined herein (the "Facility") shall consist of that certain *[insert description of the Facility including fuel type and Nameplate Capacity rating in AC and DC]* which is located at *[insert facility address]*.

(Hereinafter, the parties are also referred to individually as a "Party" and collectively as the "Parties").

In consideration of the mutual covenants herein contained, the Parties hereto, for themselves, their successors and assigns, do hereby agree to the following:

1. **Service Requirements**

1.1 Seller shall sell and deliver exclusively to the Company all of the electric power generated by the Facility, net of the Facility's own auxiliary electrical requirements and the Company shall purchase, receive, use and pay for the same, subject to the conditions contained in this Agreement. Upon the completion of the installation, by Company, of its system upgrades and interconnection facilities at the point of delivery of Seller's and Company's conductors, Seller shall become responsible for the payment to Company of any and all charges that may apply, whether or not Seller actually delivers any electricity to Company. If the Seller requests standby, back-up and/or maintenance power for the Facility's auxiliary electrical requirements from the Company, such power shall be provided to Supplier pursuant to a separate electric service agreement under the Company's rate schedule appropriate for such service.

1.2 Electricity supplied by the Seller shall be [*single (1)/three (3)*] phase, alternating at a frequency of approximately sixty (60) hertz, and at approximately ______volts, ______ wires at a sufficient power factor to maintain system operating parameters as specified by Company.

1.3 Delivery of said Seller's Power shall be at a point of delivery described as follows: ____.

1.4 The Contract Capacity of the Facility, as defined in the Terms and Conditions for the Purchase of Electric Power is **_______**-AC kW/MW. The estimated annual energy production of the Facility is ___________kWh.

2. **Rate Schedule**

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with all the terms and conditions of the Company's Purchased Power Schedule PP(SC), *[Variable Rate][5-year Fixed Long-Term Rate], [10-year Fixed Long-Term Rate] for [Distribution][Transmission] Interconnection]* ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the Public Service Commission of South Carolina ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), Integration Services Charge, and all non-rate provisions.

3. **Initial Delivery Date**

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company, unless otherwise mutually agreed to by the Parties, and continuing for the term specified in the Rate schedule paragraph above and shall automatically extend unless terminated by either party by giving not less than thirty (30) days prior written notice. Any automatic extension of this Agreement will be at the Variable Rates in effect at the time of extension. Unless otherwise mutually agreed to by the Parties, the term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be **_____________**, 20**__**. Company at its sole discretion may terminate this Agreement on _____________, 20__ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner) if Seller is unable to provide generation capacity and energy production consistent with the energy production levels specified in Provision No. 1.4 above.

4. **Interconnection Facilities**

Unless otherwise required by Company, an Interconnection Agreement pursuant to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-

Jurisdictional Interconnections shall be executed by Seller, including any applicable payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. *(Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a)* The Interconnection Facilities Charge shall be specified in the Interconnection Agreement, or *(b)* The Interconnection Facilities Charge shall be 1.7% of the installed cost of metering and other equipment and is $____ per month.

5. **Reporting Requirements**

Upon request, facilities may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the execution by Company and Seller, in the block provided below, this Agreement together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and delivered to Company by Seller from the above described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:

____

Printed: ______________________

____

Printed: ______________________

______________________________, **Seller**

By ____

Printed: ____________________________________

Title ______________________________________

This _____ day of ____________________, 20___

ACCEPTED: DUKE ENERGY CAROLINAS, LLC

By ______________________________

Title ____________________________

This _____ day of __________, 20 ____

Mail Payment/Bill to:

____

____

____

____

1. PURCHASE POWER AGREEMENT

These "Terms and Conditions" provide a mechanism through which Duke Energy Carolinas, LLC, hereafter called the "Company," will agree to purchase energy or capacity or both from an Eligible Qualifying Facility as defined in the Purchased Power Schedule PP. This Purchase Power Agreement is solely for the purchase of electricity produced by Seller's generation, net of generator auxiliary requirement, and does not provide for the sale of any electric service by the Company to the Seller.

(a) Description - The Purchase Power Agreement (hereinafter sometimes termed "Agreement") shall consist of (1) the Company's form of Purchase Power Agreement when signed by Seller and accepted by the Company, (2) the applicable Schedule for the purchase of electricity as specified in the Purchase Power Agreement, and (3) these Terms and Conditions for the Purchase of Electric Power (hereinafter referred to as "Terms and Conditions"), and all changes, revisions, alterations therein, or substitutions therefor lawfully made.

(b) Application of Terms and Conditions and Schedules - All Purchase Agreements in effect at the effective date of this tariff or that may be entered into in the future, are made expressly subject to these Terms and Conditions, and subject to all applicable Schedules as specified in the Purchase Power Agreement, and any changes therein, substitutions thereof, or additions thereto lawfully made, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract or by order of the state regulatory authority having jurisdiction (hereinafter "Commission").

(c) Conflicts - In case of conflict between any provision of a Schedule and of these Terms and Conditions, the provision of the Schedule shall prevail.

(d) Waiver - The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.

(e) Assignment of Agreement - A Purchase Power Agreement between the Company and the Seller may not be transferred and assigned by Seller to any person, firm, or corporation purchasing or leasing and intending to continue the operation of the plant or business which is interconnected under such Agreement, ~~subject to~~without the prior written approval of the Company. ~~The Company will grant such approval upon being reasonably satisfied that the assignee will fulfill the terms of the Agreement and if, at the Company's option, a satisfactory guarantee for the payment of any applicable bills is furnished by assignee.~~ A Purchase Power Agreement shall not be transferred and assigned by the Seller to any person, firm, or corporation that is party to any other purchase agreement under which a party sells or seeks to sell power to the Company from another Qualifying Facility that is located within one-half mile, as measured from the electrical generating equipment. The Company will not unreasonably withhold consent provided that such assignment does not require any amendment to the terms and conditions of this Agreement, other than the notice provision thereof. Any assignment that the Company has not approved in writing shall be null and void and not effective for all purposes. However, before such rights and obligations are assigned, the assignee must first obtain necessary approval from all regulatory bodies including, but not limited to, the Commission.

(f) Notification of Assignment, Transfer or Sale - In the event of an assignment of the rights and obligations accruing to the Seller under this Agreement, or in the event of any contemplated sale, transfer or assignment of the Facility, the Seller shall, in addition to obtaining the approvals hereof, provide a minimum of 30 days prior written notice advising the Company of any plans for such an assignment, sale or transfer.

(g) Suspension of Sales Under Agreement at Seller's Request - If the Seller is temporarily unable to produce the electricity contracted for due to physical destruction of, or damage to, his premises, the Company will, upon written request of the Seller, and for a period the Company deems as reasonably required to replace or repair such premises, suspend billing under the Agreement, exclusive of any Monthly Facilities Charges, effective with the beginning of the next sales period.

(h) Termination of Agreement at Seller's Request - If the Seller desires to terminate the Agreement, the Company will agree to such termination if all bills for services previously rendered to Seller including any termination or other charges applicable under any Interconnection ~~a~~Agreement~~ to interconnect~~, plus any applicable termination charges, have been paid. Termination charges shall consist of any applicable termination charges for premature termination of capacity as set forth in paragraphs 4 and 6 of these Terms and Conditions. The Company may waive the foregoing provision if the Company has secured or expects to secure from a new occupant or operator of the premises an Agreement satisfactory to the Company for the delivery of electricity to the Company for a term not less than the unexpired portion of the Seller's Agreement.

(i) Company's Right to Terminate or Suspend Agreement – The Company, in addition to all other legal remedies, may either terminate the Agreement or suspend purchases of electricity from Seller based on any of the following: (l)~~ for~~ any default or breach of the Agreement by the Seller, (2)~~ for~~ fraudulent or unauthorized use of the Company's meter, (3)~~ for~~ failure to pay any applicable bills when due and payable, (4) any material modification to the Facility without the Company's consent or otherwise delivering energy in excess of the estimated annual energy production of the Facility, (5) ~~for~~ ~~a~~any condition on the Seller's side of the point of delivery actually known by the Company to be, or which the Company reasonably anticipates may be, dangerous to life or property, or (~~5~~6) Seller fails to deliver energy to the Company for six (6) consecutive months. Termination of the Agreement shall be at the Company's sole option and is only appropriate when the Seller either cannot or will not cure its default.~~due to the Seller's inability to deliver to the Company the quality and/or quantity of electricity mutually agreed to in the Purchase Agreement.~~

No such termination or suspension, however, will be made by the Company without written notice delivered to Seller, personally or by mail, stating what in particular in the Agreement has been violated, except that no notice need to be given in instances set forth in 1~~.~~(i)(2) or 1(i)(5) above. The Company shall give the Seller a minimum of thirty (30) calendar days prior written notice before suspending or terminating the Agreement pursuant to provisions 1~~.~~(i)(1), 1(i)(3)-(4)~~, and (5)~~. The Company shall give the Seller five (5) calendar days prior written notice before suspending or terminating the Agreement pursuant to provision 1~~.~~(i)(~~4~~6).

Failure of the Company to terminate the Agreement or to suspend the purchase of electricity at any time after the occurrence of grounds therefor, or to resort to any other legal remedy or to exercise any one or more of such alternative remedies, shall not waive or in any manner affect the Company's right later to resort to any one or more of such rights or remedies on account of any such ground then existing or which may subsequently occur.

Any suspension of the purchase of electricity by the Company or termination of the Agreement upon any authorized grounds shall in no way operate to relieve the Seller of the Seller's liability to compensate the Company for services and/or facilities supplied, nor shall it relieve the Seller (1) of the Seller's liability for the payment of minimum monthly charges during the period of suspension, nor (2) of the Seller's liability for damages, if the Agreement has been terminated, in the amount of (a) the minimum monthly charges which would have been payable during the unexpired term of the Agreement plus (b) the Early Contract Termination charge as set forth in these Terms and Conditions.

2. CONDITIONS OF SERVICE

(a) The Company is not obligated to purchase electricity from the Seller unless and until: (1) the Company's form of Purchase Power Agreement is executed by the Seller and accepted by the Company; (2) in cases where it is necessary to cross private property to accept delivery of electricity from the Seller, the Seller conveys or causes to be conveyed to the Company, without cost to the Company, a right-of-way easement, satisfactory to the Company, across such private property which will provide for the construction, maintenance, and operation of the Company's lines and facilities, necessary to receive electricity from Seller; provided, however, in the absence of a formal conveyance, the Company nevertheless, shall be vested with an easement over Seller's premises authorizing it to do all things necessary including the construction, maintenance, and operation of its lines and facilities for such purpose; and (3) any inspection certificates or permits that may be required by law in the local area are furnished to the Company. Where not required by law, an inspection by a Company-approved inspector shall be made at the Seller's expense. In the event the Seller is unable to secure such necessary rights of way, the Seller shall reimburse the Company for all costs the Company may incur for the securing of such rights of way.

(b) The obligation of the Company in regard to service under the Agreement are dependent upon Company securing and retaining all necessary rights-of-way, privileges, franchises, and permits, for such service. The Company shall not be liable to any Seller in the event Company is delayed or prevented from purchasing power by the Company failure to secure and retain such rights-of-way, privileges, franchises, and permits. The Seller shall operate its Facility in compliance with all: (i) system operator instructions provided by the Company, including any energy storage protocols provided if applicable; (ii) applicable operating guidelines established by the North American Electric Reliability Corporation ("NERC") and (iii) the SERC Reliability Corporation ("SERC") or any successor thereto.

(c) The Seller shall submit an Interconnection ~~r~~Request ~~to interconnect~~as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. ~~—~~The Company shall not be required to install facilities to support interconnection of the Seller's generation or execute the Purchase Power Agreement until Seller has signed an Interconnection ~~a~~Agreement ~~to interconnect~~as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections, as may be required by the Company.

(d) If electricity is received through lines which cross the lands of the United States of America, a state, or any agency or subdivision of the United States of America or of a state, the Company shall have the right, upon 30 days' written notice, to discontinue receiving electricity from any Seller or Sellers interconnected to such lines, if and when (1) the Company is required by governmental authority to incur expenses in the relocation or the reconstruction underground of any portion of said lines, unless the Company is reimbursed for such expense by Sellers or customers connected thereto, or (2) the right of the Company to maintain and operate said lines is terminated, revoked, or denied by governmental authority for any reason.

3. DEFINITIONS

(a) Nameplate Capacity: The term "Nameplate Capacity" shall mean the manufacturer's nameplate rated output capability of the ~~generator~~Facility as measured at the delivery point specified in AC. For multi-unit generator facilities, the "Nameplate Capacity" of the ~~f~~Facility shall be the sum of the individual manufacturer's kW_{AC} nameplate rated output capabilities of the generators. The Nameplate Capacity shall also include the DC rating of the Facility. For inverted based generating facilities, the "Nameplate Capacity" shall be the manufacturer's rated kW_{AC} output on the inverters. The Nameplate Capacity shall also include the DC rating of the Facility.

~~(b) Net Capacity: The term "Net Capacity" shall mean the Nameplate Capacity of the Seller's generating facilities, less the portion of that capacity needed to serve the generating facilities' Auxiliary Load.~~

~~(c)~~(b) Auxiliary Load: The term "Auxiliary Load" shall mean power used to operate auxiliary equipment in the ~~f~~Facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters).

~~(d)~~(c) Whenever the term "purchase" or "purchase of electricity" is used in these Terms and Conditions or other portions of the Agreement, it shall be construed to refer to the electricity supplied to the Company by Seller from the Facility.

~~(e)~~(d) The term "Company's conductors" shall mean the Company's wires extending from the point of connection with the Company's existing electric system to the point of delivery.

~~(f)~~(e) The term "Seller's conductors" shall mean the Seller's wires extending from the point of delivery to the switch box or other point where the Seller's circuits connect for the purpose of supplying the electricity produced by the Seller.

(f) The term "'interconnection" shall mean the connection of Company's conductors to Seller's conductors.

(g) The term "Facility" shall have the meaning specified in the Purchase Power Agreement.

4. CONTRACT CAPACITY

(a) The Contract Capacity shall be ~~the kW of capacity~~as specified in the Purchase Power Agreement and shall not exceed the capacity specified in the Seller's Interconnection Agreement. This term shall mean the maximum continuous electrical output capability expressed on an alternating current basis of the generator(s) at any time, at a power factor of approximately unity, without consuming VARs supplied by the Company, as measured at the Point of Delivery and shall be the maximum kW_{AC} delivered to the Company during any billing period. ~~In cases where any change is required in the Company's facilities due to the actual capacity delivered exceeding the Contract~~

~~Capacity or due to the Seller requesting an increase in the capacity of Company's facilities, the Company may require the Seller to execute a new Agreement or amend an existing Agreement, thereby establishing a new Contract Capacity. If the Company's facilities cannot be upgraded to accept such actual or requested increase, then upon written notice,~~ The Seller shall not exceed the existing Contract Capacity or deliver energy in excess of the estimated annual energy production of the Facility unless and until the increase has been agreed to in an amendment executed by the Company and the Seller and the Seller's facilities have been upgraded to accept the actual or requested increase as may be required by the Company in its sole discretion~~such amount in excess thereof as the Company determines it is able to accept.~~.

(b) The Seller shall not change ~~its generating capacity~~the Contract Capacity or contracted estimated annual kWh energy production without adequate notice to the Company, and without receiving the Company's prior written consent, and such unauthorized increase causes loss of or damage to the Company's facilities, the cost of making good such loss or repairing such damage shall be paid by the Seller.

(c) The Company may require that a new Contract Capacity be determined when it reasonably appears that the capacity of the Seller's generating facility or annual energy production will deviate from contracted or established levels for any reason, including, but not limited to, a change in water flow, steam supply, or fuel supply.

(d) Any material modification to the Facility, including without limitation, a change in the AC or DC output capacity of the Facility or the addition of energy storage capability shall require the prior written consent of the Company, which may be withheld in the Company's sole discretion, and shall not be effective until memorialized in an amendment executed by the Company and the Seller.~~In the event that the Contract Capacity is terminated, in whole or in part, prior to the completion of the term of the Agreement, the Seller shall pay to the Company a penalty as set forth in paragraph 6, below.~~

5. ~~CONTRACT~~ESTIMATED ANNUAL ENERGY PRODUCTION

The ~~Contract Energy~~estimated annual energy production from the Facility specified in the Purchase Power Agreement shall be the estimated total annual kilowatt-hours registered or computed by or from the Company's metering facilities for each time period during a continuous 12-month interval.

6. EARLY CONTRACT TERMINATION OR INCREASE IN CONTRACT CAPACITY OR CONTRACT ENERGY

~~If Seller terminates the Agreement prior to the expiration of the initial (or extended) term of the Purchase Agreement, the following payment shall be made to the Company by the Seller:~~

(a) Early Contract Termination – If ~~T~~the Seller terminates the Agreement or if the Agreement is terminated by the Company as permitted in Section 1(i) prior to the expiration of the initial (or extended) term of the Purchase Power Agreement, the Seller shall pay to the Company the total Energy and/or Capacity credits received in excess of the sum of what would have been received under the Variable Rate for Energy and/or Capacity Credits applicable at the initial term of the contract period and as updated every two years, plus interest. The interest should be the weighted average rate for new debt issued by the Company in the calendar year previous to that in which the Agreement was commenced.

(b) Increase ~~In~~in Contract Capacity – The Seller may apply to the Company to increase the Contract Capacity during the Contract Period and, upon approval by the Company and an amendment to implement the change has been executed by the Company and the Customer, future Monthly Delivered Capacities shall not exceed the revised Contract Capacity. If such increase in Contract Capacity results in additional costs associated with redesign or a resizing of the Company's facilities, such additional costs to Seller shall be determined in accordance with ~~any agreement~~the Interconnection Agreement~~ to interconnect~~. Notwithstanding the foregoing, the Company shall not be obligated to accept any increase in Contract Capacity under the rates and terms of the existing Agreement, and, in the Company's sole discretion, may require the Seller to enter into a new Power Purchase Agreement.

7. CONTRACT RENEWAL

This Agreement shall be subject to renewal for subsequent term(s) at the option of the Company on substantially the same terms and provisions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration the Company's then avoided cost rates and other relevant factors, or (2) set by the Commission.

8. QUALITY OF ENERGY RECEIVED

(a) The Seller has full responsibility for the routine maintenance of ~~his~~its generating and protective equipment to insure~~ that~~ reliable, utility grade electric energy is being delivered to the Company.

(b) The~~ Seller's f~~Facility shall be operated in such a manner as to generate reactive power as may be reasonably necessary to maintain voltage levels and reactive area support as specified by the Company. Any operating requirement is subject to modification or revision if warranted by future changes in the distribution or transmission circuit conditions.

(c) The Seller may operate direct current generators in parallel with the Company through a synchronous inverter. The inverter installation shall be designed such that a utility system interruption will result in the removal of the inverter infeed into the Company's system. Harmonics generated by a DC generator-inverter combination must not adversely affect the Company's supply of electric service to, or the use of electric service by the Company's other customers, and any correction thereof is the full responsibility of Seller.

(d) In the event the Company determines, based on calculations, studies, analyses, monitoring, measurement or observation, that the output of the Facility will cause or is causing the Company to be unable to provide proper voltage levels to its customers, the Seller shall be required to comply with a voltage schedule and/or reactive power output schedule as prescribed by the Company.

(e) All material modifications to the Facility shall require the prior written consent from the Company, and~~The~~ the Seller shall provide the Company written notification of any requested changes to the~~ir generation system~~Facility, support equipment such as inverters, or interconnection facilities as soon as reasonably possible to allow~~and shall provide~~ the Company adequate time to review such requested changes to ensure continued safe interconnection prior to implementation.

(f) Failure of the Seller to comply with (a), (b), (c), (d) or (e) in paragraph 8 above will constitute grounds for the Company to cease parallel operation with Seller's generation equipment and constitute grounds for termination or suspension of the Agreement as set forth under paragraph 1 above.

9. BILLING

(a) Meters will be read and bills rendered monthly. Readings are taken each month at intervals of approximately thirty (30) days.

(b) If the Company is unable to read its purchase meter for any reason, the Seller's production may be estimated by the Company on the basis of the Seller's production during the most recent preceding billing period for which readings were obtained, unless some unusual condition is known to exist. A bill or payment rendered on the basis of such estimate shall be as valid as if made from actual meter readings.

(c) The term "Month" or "Monthly", as used in the Company's Schedules and Riders, refers to the period of time between the regular meter readings by the Company, except that if the period covered by an initial or final bill, or due to rerouting of the meter reading schedule, is more than 35 or less than 25 days, the bill will be prorated based on a 30-day billing month.

(d) Payments for capacity and/or energy will be made to the Seller based on the rate schedule stated in the Purchase Power Agreement.

(e) The Company reserves the right to set off against any amounts due from the Company to Seller, any amounts which are due from Seller to the Company, including, but not limited to, unpaid charges pursuant to the Interconnection ~~a~~Agreement~~ to interconnect~~ or past due balances on any accounts the Seller has with the Company for other services.~~ The Company shall include a written description of any amounts setoff due from the Company to the Seller in the applicable monthly bill.~~

10. RECORDS

In addition to the regular meter readings to be taken monthly for billing purposes, the Company may require additional meter readings, records, transfer of information, etc. as may be agreed upon by the Parties. The Company reserves the right to provide to the Commission or the FERC or any other regulatory body, upon request, information pertaining to this Agreement, including but not limited to: records of the Facility's generation output and the Company's purchases thereof (including copies of monthly statements of power purchases and data from load recorders and telemetering installed at the Facility); copies of this Agreement. The Company will not provide any information developed solely by the Seller and designated by the Seller in writing to be "proprietary" unless~~ expressly~~ required to do so by order of the Commission or the FERC or any other regulatory body or court, in which event, the Company will notify the Seller prior to supplying the proprietary information.~~ The Company will provide the proprietary information under the applicable procedures of the Commission, the FERC or other regulatory body or court for the submission of proprietary and confidential information, but shall not be required to otherwise defend or support the designation of the information as proprietary. Any and all support, defense or justification of the designation of the information as proprietary shall be the sole and exclusive responsibility of Seller. ~~ The Seller shall provide to the Company, on a monthly basis within ten (10) days of the meter reading date and in form to be mutually agreed upon by the Parties, information on the Facility's fuel costs (coal, oil, natural gas, supplemental firing, etc.), if any, for the power delivered to the Company during the preceding month's billing period.

11. METER STOPPAGE OR ERROR

In the event a meter fails to register accurately within the allowable limits established by the state regulatory body having jurisdiction, the Company will adjust the measured energy for the period of time the meter was shown to be in error, and shall, as provided in the rules and regulations of the state regulatory body having jurisdiction, pay to the Seller, or the Seller shall refund to the Company, the difference between the amount billed and the estimated amount which would have been billed had the meter accurately registered the kilowatt hours provided by the Seller. No part of any minimum service charge shall be refunded.

12. POINT OF DELIVERY

The point of delivery is the point where the Company's conductors are, or are to be, connected to Seller's conductors. The Seller shall do all things necessary to bring its conductors to such point of delivery for connection to the Company's conductors, and shall maintain said conductors in good order at all times. If the Seller chooses to deliver power to the Company through a point of delivery where the Seller presently receives power from the Company, then the point of delivery for the purchase of generation shall be the same point as the point of delivery for electric service.

13. INTERCONNECTION FACILITIES

~~Unless otherwise addressed in a separate agreement to interconnect,~~ If the Seller is not subject to the terms and conditions of the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections as approved in Docket No. 2015-362-E, the following conditions shall apply to Interconnection Facilities necessary to deliver the Seller's electricity to the Company. Otherwise, the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections in Docket No. 2015-362-E govern.

(a) By Company: The Company shall install, own, operate, maintain, and otherwise furnish all lines and equipment located on its side of the point of delivery to permit parallel operation of the Seller's facilities with the Company's system. It shall also install and own the necessary metering equipment, and meter transformers, where necessary, for measuring the electricity delivered to the Company, though such meter may be located on the Seller's side of the point of delivery. Interconnection facilities, installed by either the Company or the Seller, solely for such purpose, include, but are not limited to connection, line extension, transformation, switching equipment, protective relaying, metering, telemetering, communications, and appropriate safety equipment.

Any interconnection facilities installed by the Company necessary to receive power from the Seller shall be considered additional facilities and shall be provided, if the Company finds it practicable, under the following conditions:

(1) The facilities will be of a kind and type normally used by or acceptable to the Company and will be installed at a place and in a manner satisfactory to the Company.

(2) Seller will pay to Company a Monthly Interconnection Facilities Charge of 1.7 percent of the estimated original installed cost and rearrangement cost of all facilities, including

metering, required to accept interconnection, but not less than $25 per month; however, the $25 minimum will not apply with the Interconnection Facilities consist only of the meter. The monthly charge for the Interconnection Facilities to be provided under this Agreement is subject to the rates, Service Regulations and conditions of the Company as the same are now on file with the Commission and may be changed or modified from time to time upon approval by the Commission. Any such changes or modifications, including those which may result in increased charges for the Interconnection Facilities to be provided by the Company, shall be made a part of this Agreement to the same effect as if fully set forth herein.

(3) If the Company increases its investment, other than replacement of existing equipment with equipment of equal capacity and kind, in interconnection facilities or other special facilities required by Seller (including conversion of the Company's primary voltage to a higher voltage), the Monthly Interconnection Facilities Charge for providing the interconnection facilities will be adjusted at that time. The Seller may terminate the interconnection facilities in accordance with the applicable termination paragraph 1 above, or continue the interconnection facilities under the changed conditions.

(4) In lieu of the Monthly Interconnection Facilities Charge of 1.7 percent, the Seller may elect to make a contribution equal to the total interconnection facilities investment, plus associated tax gross-ups. In lieu of the monthly charge above, at the Company's option, the Customer may elect to be billed under an alternative payment option to the 1.7 percent per month. Under such option, the payment must be renewed after each thirty (34) year period.

(5) The Monthly Interconnection Facilities Charge as determined shall continue regardless of the term of the Agreement until the Seller no longer has need for such facilities. In the event the Seller's interconnection facilities should be discontinued or terminated in whole or in part, such discontinuation or termination should be calculated in accordance with 1, above.

(6) The Seller's wiring and appurtenant structures shall provide for the location, connection, and installation of the Company's standard metering equipment or other equipment deemed necessary by the Company for the metering of the Seller's electrical output. The Company shall, at its expense, be permitted to install, in the Seller's wiring or equipment, any special metering devices or equipment as deemed necessary for experimental or monitoring purposes.

(7) The Company shall furnish and install the Interconnection Facilities no later than the date requested by the Seller for such installation. Seller's obligation to pay the Interconnection Facilities charges shall begin upon the earlier of (1) completion of the installation but no earlier than the requested in-service date ~~that such~~specified in the Interconnection Agreement or (2) the date where energy is generated and delivered to the Company~~Facilities become operational, except as provided in Paragraph 3.4 hereof,~~ and such charges shall apply at all times thereafter during the term of this Agreement, whether or not the Seller is actually supplying electric power to the Company.

(b) By Seller: The Seller shall install, own, operate, and maintain all lines, and equipment, exclusive of the Company's meter and meter transformers, on the Seller's side of the point of delivery. The Seller will be the owner and have the exclusive control of, and responsibility for, all electricity on Seller's side of the point of delivery. The Seller must conform to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections~~any State approved interconnection requirements~~. The Seller's wiring shall be arranged such that all electricity generated for sale can be supplied to one point of delivery and measured by a single meter. The Company's meter may be located on the Seller's side of the point of delivery, and when it is to be so located, the Seller must make suitable provisions in the Seller's wiring, at a place suitable to the Company, for the convenient installation of the type of meter the Company will use. All of the Seller's conductors installed on the Company's side of the meter and not installed in conduit must be readily visible.

The Seller shall install and maintain devices adequate to protect the Seller's equipment against irregularities on the Company's system, including devices to protect against single-phasing. The Seller shall also install and maintain such devices as may be necessary to automatically disconnect the Seller's generating equipment, which is operated in parallel with the Company, when service provided by the Seller is affected by electrical disturbances on the Company's or the Seller's systems, or at any time when the Company's system is de-energized from its prime source.

(c) Access to Premises: The duly authorized agents of the Company shall have the right of ingress and egress to the premises of the Seller at all reasonable hours for the purpose of reading meters, inspecting the Company's wiring and apparatus, changing, exchanging, or repairing the Company's property on the premises of the Seller, or removing such property at the time of or at any time after suspension of purchases or termination of this Agreement.

(d) Protection: The Seller shall protect the Company's wiring and apparatus on the Seller's premises and shall permit no one but the Company's agents to handle same. In the event of any loss of or damage to such property of the Company caused by or arising out of carelessness, neglect, or misuse by the Seller or the Seller's employees or agents, the cost of making good such loss or repairing such damage shall be paid by the Seller. In cases where the Company's service facilities on the Seller's premises require abnormal maintenance due to the Seller's operation, the Seller shall reimburse the Company for such abnormal maintenance cost.

14. CONTINUANCE OF PURCHASES AND LIABILITY THEREFOR

The Parties do not guarantee continuous service but shall use reasonable diligence at all times to provide for uninterrupted acceptance and supply of electricity. ~~They~~Each Party shall at all times use reasonable diligence~~ at all times~~ to provide satisfactory service for the acceptance or supply of electricity, and to remove the cause or causes in the event of failure, interruption, reduction or suspension of service for the acceptance or supply of electricity, but neither Party shall be liable for any loss or damage resulting from such failure, interruption, reduction or suspension of service, nor shall same be a default hereunder, when any interruption of service for the acceptance or supply of electricity is due to any of the following:

(a) An emergency condition or action due to an adverse event and/or condition or disturbance on the Company's system, or on any other system directly or indirectly interconnected with it, which requires automatic or manual interruption of the supply of electricity to some customers or areas or automatic or manual interruption, reduction, or cessation of the acceptance of electricity into the Company's electrical system in order to limit the occurrence of or extent or damage of the adverse condition or disturbance to the Company's system or capability to reliably provide service in compliance and accordance with prudent practices, regulatory requirements, and/or reliability standards, or to prevent damage to generating or transmission facilities, or to expedite restoration of service, or to effect a reduction in service to compensate for an emergency condition on an interconnected system. An emergency condition or action shall include any circumstance that requires action by the Company to comply with any electric reliability organization or NERC/SERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to the Seller's Facility, reliability impairment, loss or damage to the Company's system, disruption of generation by the Seller, disruption of reliability or service on the Company's system, an abnormal condition on the system, and/or endangerment to human life or safety.

(b) An event or condition of force majeure, as described below.

(c) Making necessary adjustments to, changes in, or repairs on the Company lines, substations, and facilities, and in cases where, in its opinion, the continuance of service from Seller's premises would endanger persons or property.

The Seller shall be responsible for promptly taking all actions requested or required by the Company to avoid, prevent, or recover from the occurrence and/or imminent occurrence of any emergency condition and in response to any emergency condition or condition of force majeure, including without limitation installing and operating any equipment necessary to take such actions.

The Seller shall be responsible for insuring the safe operation of ~~his~~its equipment at all times, and will install and maintain, to the Company's satisfaction, the necessary automatic equipment to prevent the backfeed of power into, or damage to the Company's de-energized system, and shall be subject to immediate disconnection of its equipment from the Company's system if the Company determines that such equipment is unsafe or adversely affects the Company's transmission/distribution system or service to its other customers.

The Seller assumes responsibility for and shall indemnify, defend, and save the Company harmless against all liability, claims, judgments, losses, costs, and expenses for injury, loss, or damage to persons or property including personal injury or property damage to the Seller or the Seller's employees on account of defective construction, wiring, or equipment, or improper or careless use of electricity, on the Seller's side of the point of delivery.

15. FORCE MAJEURE

Circumstances beyond the reasonable control of a Party which solely cause that Party to experience delay or failure in delivering or receiving electricity or in providing continuous service hereunder, including: acts of God; unusually severe weather conditions; earthquake; strikes or other labor difficulties; war; riots; fire; requirements shall be deemed to be "events or conditions of force majeure". It also includes actions or failures to act on the part of governmental authorities (including the adoption or change in any rule or regulation or environmental constraints lawfully imposed by federal, state or local government bodies), but only if such requirements, actions or failures to act prevent or delay performance; or transportation delays or accidents. Events or conditions of force majeure do not include such circumstances which merely affect the cost of operating the Facility.

Neither Party shall be responsible nor liable for any delay or failure in its performance hereunder due solely to events or conditions of force majeure, provided that:

(a) The affected Party gives the other Party written notice describing the particulars of the event or condition of force majeure, such notice to be provided within forty-eight (48) hours of the determination by the affected Party that an event or condition of force majeure has occurred, but in no event later than thirty (30) days from the date of the occurrence of the event or condition of force majeure;

(b) The delay or failure of performance is of no longer duration and of no greater scope than is required by the event or condition of force majeure, provided that in no event shall such delay or failure of performance extend beyond a period of twelve (12) months;

(c) The affected Party uses its best efforts to remedy its inability to perform;

(d) When the affected Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party prompt written notice to that effect; and,

(e) The event or condition of force majeure was not caused by or connected with any negligent or intentional acts, errors, or omissions, or failure to comply with any law, rule, regulation, order or ordinance, or any breach or default of this Agreement.

16. INSURANCE

The Seller shall obtain and retain, for as long as the generation is interconnected with the Company's system, either the applicable home_owner's insurance policy with liability coverage of at least $100,000 per occurrence or the applicable comprehensive general liability insurance policy with liability coverage in the amount of at least $300,000 per occurrence, which protects Seller from claims for bodily injury and/or property damage. This insurance shall be primary for all purposes. Seller shall provide certificates evidencing this coverage as required by the Company. The Company reserves the right to refuse to establish, or continue the interconnection of the Seller's generation with the Company's system, if such insurance is not in effect.

17. GOVERNMENTAL RESTRICTIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either party or over this Agreement. This Agreement shall not become effective until all required governmental authorizations are obtained. Certification of receipt of all permits and authorizations shall be furnished by the Seller to the Company upon the Company's request. This Agreement shall not become effective unless it and all provisions thereof are authorized and permitted by such governmental agencies without change or conditions.

This Agreement shall at all times be subject to changes by such governmental agencies, and the parties shall be subject to conditions and obligations, as such governmental agencies may, from time to time, direct in the exercise of their jurisdiction, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract. Both parties agree to exert their best efforts to comply with all of the applicable rules and regulations of all governmental agencies having control over either party or this Agreement. The parties shall take all reasonable action necessary to secure all required governmental approval of this Agreement in its entirety and without change.

The delivery date, quantity, and type of electricity to be accepted for purchase by the Company, from the Seller, are subject to changes, restrictions, curtailments, or complete suspensions by the Company as may be deemed by it to be necessary or advisable (a) on account of any lawful order or regulation of any municipal, State, or Federal government or agency thereof, or order of any court of competent jurisdiction, or (b) on account of any emergency due to war, or catastrophe, all without liability on the part of the Company therefor.

1. PURCHASE POWER AGREEMENT

These "Terms and Conditions" provide a mechanism through which Duke Energy Carolinas, LLC, hereafter called the "Company," will agree to purchase energy or capacity or both from an Eligible Qualifying Facility as defined in the Purchased Power Schedule PP. This Purchase Power Agreement is solely for the purchase of electricity produced by Seller's generation, net of generator auxiliary requirement, and does not provide for the sale of any electric service by the Company to the Seller.

(a) Description - The Purchase Power Agreement (hereinafter sometimes termed "Agreement") shall consist of (1) the Company's form of Purchase Power Agreement when signed by Seller and accepted by the Company, (2) the applicable Schedule for the purchase of electricity as specified in the Purchase Power Agreement, and (3) these Terms and Conditions for the Purchase of Electric Power (hereinafter referred to as "Terms and Conditions"), and all changes, revisions, alterations therein, or substitutions therefor lawfully made.

(b) Application of Terms and Conditions and Schedules - All Purchase Agreements in effect at the effective date of this tariff or that may be entered into in the future, are made expressly subject to these Terms and Conditions, and subject to all applicable Schedules as specified in the Purchase Power Agreement, and any changes therein, substitutions thereof, or additions thereto lawfully made, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract or by order of the state regulatory authority having jurisdiction (hereinafter "Commission").

(c) Conflicts - In case of conflict between any provision of a Schedule and of these Terms and Conditions, the provision of the Schedule shall prevail.

(d) Waiver - The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.

(e) Assignment of Agreement - A Purchase Power Agreement between the Company and the Seller may not be transferred and assigned by Seller to any person, firm, or corporation purchasing or leasing and intending to continue the operation of the plant or business which is interconnected under such Agreement, without the prior written approval of the Company. A Purchase Power Agreement shall not be transferred and assigned by the Seller to any person, firm, or corporation that is party to any other purchase agreement under which a party sells or seeks to sell power to the Company from another Qualifying Facility that is located within one-half mile, as measured from the electrical generating equipment. The Company will not unreasonably withhold consent provided that such assignment does not require any amendment to the terms and conditions of this Agreement, other than the notice provision thereof. Any assignment that the Company has not approved in writing shall be null and void and not effective for all purposes. However, before such rights and obligations are assigned, the assignee must first obtain necessary approval from all regulatory bodies including, but not limited to, the Commission.

(f) Notification of Assignment, Transfer or Sale - In the event of an assignment of the rights and obligations accruing to the Seller under this Agreement, or in the event of any contemplated sale, transfer or assignment of the Facility, the Seller shall, in addition to obtaining the approvals hereof, provide a minimum of 30 days prior written notice advising the Company of any plans for such an assignment, sale or transfer.

(g) Suspension of Sales Under Agreement at Seller's Request - If the Seller is temporarily unable to produce the electricity contracted for due to physical destruction of, or damage to, his premises, the Company will, upon written request of the Seller, and for a period the Company deems as reasonably required to replace or repair such premises, suspend billing under the Agreement, exclusive of any Monthly Facilities Charges, effective with the beginning of the next sales period.

(h) Termination of Agreement at Seller's Request - If the Seller desires to terminate the Agreement, the Company will agree to such termination if all bills for services previously rendered to Seller including any termination or other charges applicable under any Interconnection Agreement, plus any applicable termination charges, have been paid. Termination charges shall consist of any applicable termination charges for premature termination of capacity as set forth in paragraphs 4 and 6 of these Terms and Conditions. The Company may waive the foregoing provision if the Company has secured or expects to secure from a new occupant or operator of the premises an Agreement satisfactory to the Company for the delivery of electricity to the Company for a term not less than the unexpired portion of the Seller's Agreement.

(i) Company's Right to Terminate or Suspend Agreement – The Company, in addition to all other legal remedies, may either terminate the Agreement or suspend purchases of electricity from Seller based on any of the following: (l) any default or breach of the Agreement by the Seller, (2) fraudulent or unauthorized use of the Company's meter, (3) failure to pay any applicable bills when due and payable, (4) any material modification to the Facility without the Company's consent or otherwise delivering energy in excess of the estimated annual energy production of the Facility, (5) any condition on the Seller's side of the point of delivery actually known by the Company to be, or which the Company reasonably anticipates may be, dangerous to life or property, or (6) Seller fails to deliver energy to the Company for six (6) consecutive months. Termination of the Agreement shall be at the Company's sole option and is only appropriate when the Seller either cannot or will not cure its default.

No such termination or suspension, however, will be made by the Company without written notice delivered to Seller, personally or by mail, stating what in particular in the Agreement has been violated, except that no notice need to be given in instances set forth in 1(i)(2) or 1(i)(5) above. The Company shall give the Seller a minimum of thirty (30) calendar days prior written notice before suspending or terminating the Agreement pursuant to provisions 1(i)(1), 1(i)(3)-(4). The Company shall give the Seller five (5) calendar days prior written notice before suspending or terminating the Agreement pursuant to provision 1(i)(6).

Failure of the Company to terminate the Agreement or to suspend the purchase of electricity at any time after the occurrence of grounds therefor, or to resort to any other legal remedy or to exercise any one or more of such alternative remedies, shall not waive or in any manner affect the Company's right later to resort to any one or more of such rights or remedies on account of any such ground then existing or which may subsequently occur.

Any suspension of the purchase of electricity by the Company or termination of the Agreement upon any authorized grounds shall in no way operate to relieve the Seller of the Seller's liability to compensate the Company for services and/or facilities supplied, nor shall it relieve the Seller (1) of the Seller's liability for the payment of minimum monthly charges during the period of suspension, nor (2) of the Seller's liability for damages, if the Agreement has been terminated, in the amount of (a) the minimum monthly charges which would have been payable during the unexpired term of the Agreement plus (b) the Early Contract Termination charge as set forth in these Terms and Conditions.

2. CONDITIONS OF SERVICE

(a) The Company is not obligated to purchase electricity from the Seller unless and until: (1) the Company's form of Purchase Power Agreement is executed by the Seller and accepted by the Company; (2) in cases where it is necessary to cross private property to accept delivery of electricity from the Seller, the Seller conveys or causes to be conveyed to the Company, without cost to the Company, a right-of-way easement, satisfactory to the Company, across such private property which will provide for the construction, maintenance, and operation of the Company's lines and facilities, necessary to receive electricity from Seller; provided, however, in the absence of a formal conveyance, the Company nevertheless, shall be vested with an easement over Seller's premises authorizing it to do all things necessary including the construction, maintenance, and operation of its lines and facilities for such purpose; and (3) any inspection certificates or permits that may be required by law in the local area are furnished to the Company. Where not required by law, an inspection by a Company-approved inspector shall be made at the Seller's expense. In the event the Seller is unable to secure such necessary rights of way, the Seller shall reimburse the Company for all costs the Company may incur for the securing of such rights of way.

(b) The obligation of the Company in regard to service under the Agreement are dependent upon Company securing and retaining all necessary rights-of-way, privileges, franchises, and permits, for such service. The Company shall not be liable to any Seller in the event Company is delayed or prevented from purchasing power by the Company failure to secure and retain such rights-of-way, privileges, franchises, and permits. The Seller shall operate its Facility in compliance with all: (i) system operator instructions provided by the Company, including any energy storage protocols provided if applicable; (ii) applicable operating guidelines established by the North American Electric Reliability Corporation ("NERC") and (iii) the SERC Reliability Corporation ("SERC") or any successor thereto.

(c) The Seller shall submit an Interconnection Request as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. The Company shall not be required to install facilities to support interconnection of the Seller's generation or execute the Purchase Power Agreement until Seller has signed an Interconnection Agreement as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections, as may be required by the Company.

(d) If electricity is received through lines which cross the lands of the United States of America, a state, or any agency or subdivision of the United States of America or of a state, the Company shall have the right, upon 30 days' written notice, to discontinue receiving electricity from any Seller or Sellers interconnected to such lines, if and when (1) the Company is required by governmental authority to incur expenses in the relocation or the reconstruction underground of any portion of said lines, unless the Company is reimbursed for such expense by Sellers or customers connected thereto, or (2) the right of the Company to maintain and operate said lines is terminated, revoked, or denied by governmental authority for any reason.

3. DEFINITIONS

(a) Nameplate Capacity: The term "Nameplate Capacity" shall mean the manufacturer's nameplate rated output capability of the Facility as measured at the delivery point specified in AC. For multi-unit generator facilities, the "Nameplate Capacity" of the Facility shall be the sum of the individual manufacturer's kW_{AC} nameplate rated output capabilities of the generators. The Nameplate Capacity shall also include the DC rating of the Facility. For inverted based generating facilities, the "Nameplate Capacity" shall be the manufacturer's rated kW_{AC} output on the inverters. The Nameplate Capacity shall also include the DC rating of the Facility.

(b) Auxiliary Load: The term "Auxiliary Load" shall mean power used to operate auxiliary equipment in the Facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters).

(c) Whenever the term "purchase" or "purchase of electricity" is used in these Terms and Conditions or other portions of the Agreement, it shall be construed to refer to the electricity supplied to the Company by Seller from the Facility.

(d) The term "Company's conductors" shall mean the Company's wires extending from the point of connection with the Company's existing electric system to the point of delivery.

(e) The term "Seller's conductors" shall mean the Seller's wires extending from the point of delivery to the switch box or other point where the Seller's circuits connect for the purpose of supplying the electricity produced by the Seller.

(f) The term "'interconnection" shall mean the connection of Company's conductors to Seller's conductors.

(g) The term "Facility" shall have the meaning specified in the Purchase Power Agreement.

4. CONTRACT CAPACITY

(a) The Contract Capacity shall be as specified in the Purchase Power Agreement and shall not exceed the capacity specified in the Seller's Interconnection Agreement. This term shall mean the maximum continuous electrical output capability expressed on an alternating current basis of the generator(s) at any time, at a power factor of approximately unity, without consuming VARs supplied by the Company, as measured at the Point of Delivery and shall be the maximum kW_{AC} delivered to the Company during any billing period. The Seller shall not exceed the existing Contract Capacity or deliver energy in excess of the estimated annual energy production of the Facility unless and until the increase has been agreed to in an amendment executed by the Company and the Seller and the Seller's facilities have been upgraded to accept the actual or requested increase as may be required by the Company in its sole discretion.

(b) The Seller shall not change the Contract Capacity or contracted estimated annual kWh energy production without adequate notice to the Company, and without receiving the Company's prior written consent, and such unauthorized increase causes loss of or damage to the Company's facilities, the cost of making good such loss or repairing such damage shall be paid by the Seller.

(c) The Company may require that a new Contract Capacity be determined when it reasonably appears that the capacity of the Seller's generating facility or annual energy production will deviate from contracted or established levels for any reason, including, but not limited to, a change in water flow, steam supply, or fuel supply.

(d) Any material modification to the Facility, including without limitation, a change in the AC or DC output capacity of the Facility or the addition of energy storage capability shall require the prior written consent of the Company, which may be withheld in the Company's sole discretion, and shall not be effective until memorialized in an amendment executed by the Company and the Seller.

5. ESTIMATED ANNUAL ENERGY PRODUCTION

The estimated annual energy production from the Facility specified in the Purchase Power Agreement shall be the estimated total annual kilowatt-hours registered or computed by or from the Company's metering facilities for each time period during a continuous 12-month interval.

6. EARLY CONTRACT TERMINATION OR INCREASE IN CONTRACT CAPACITY OR CONTRACT ENERGY

(a) Early Contract Termination – If the Seller terminates the Agreement or if the Agreement is terminated by the Company as permitted in Section 1(i) prior to the expiration of the initial (or extended) term of the Purchase Power Agreement, the Seller shall pay to the Company the total Energy and/or Capacity credits received in excess of the sum of what would have been received under the Variable Rate for Energy and/or Capacity Credits applicable at the initial term of the contract period and as updated every two years, plus interest. The interest should be the weighted average rate for new debt issued by the Company in the calendar year previous to that in which the Agreement was commenced.

(b) Increase in Contract Capacity – The Seller may apply to the Company to increase the Contract Capacity during the Contract Period and, upon approval by the Company and an amendment to implement the change has been executed by the Company and the Customer, future Monthly Delivered Capacities shall not exceed the revised Contract Capacity. If such increase in Contract Capacity results in additional costs associated with redesign or a resizing of the Company's facilities, such additional costs to Seller shall be determined in accordance with the Interconnection Agreement. Notwithstanding the foregoing, the Company shall not be obligated to accept any increase in Contract Capacity under the rates and terms of the existing Agreement, and, in the Company's sole discretion, may require the Seller to enter into a new Power Purchase Agreement.

7. CONTRACT RENEWAL

This Agreement shall be subject to renewal for subsequent term(s) at the option of the Company on substantially the same terms and provisions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration the Company's then avoided cost rates and other relevant factors, or (2) set by the Commission.

8. QUALITY OF ENERGY RECEIVED

(a) The Seller has full responsibility for the routine maintenance of its generating and protective equipment to insure reliable, utility grade electric energy is being delivered to the Company.

(b) The Facility shall be operated in such a manner as to generate reactive power as may be reasonably necessary to maintain voltage levels and reactive area support as specified by the Company. Any operating requirement is subject to modification or revision if warranted by future changes in the distribution or transmission circuit conditions.

(c) The Seller may operate direct current generators in parallel with the Company through a synchronous inverter. The inverter installation shall be designed such that a utility system interruption will result in the removal of the inverter infeed into the Company's system. Harmonics generated by a DC generator-inverter combination must not adversely affect the Company's supply of electric service to, or the use of electric service by the Company's other customers, and any correction thereof is the full responsibility of Seller.

(d) In the event the Company determines, based on calculations, studies, analyses, monitoring, measurement or observation, that the output of the Facility will cause or is causing the Company to be unable to provide proper voltage levels to its customers, the Seller shall be required to comply with a voltage schedule and/or reactive power output schedule as prescribed by the Company.

(e) All material modifications to the Facility shall require the prior written consent from the Company, and the Seller shall provide the Company written notification of any requested changes to the Facility, support equipment such as inverters, or interconnection facilities as soon as reasonably possible to allow the Company adequate time to review such requested changes to ensure continued safe interconnection prior to implementation.

(f) Failure of the Seller to comply with (a), (b), (c), (d) or (e) in paragraph 8 above will constitute grounds for the Company to cease parallel operation with Seller's generation equipment and constitute grounds for termination or suspension of the Agreement as set forth under paragraph 1 above.

9. <u>BILLING</u>

(a) Meters will be read and bills rendered monthly. Readings are taken each month at intervals of approximately thirty (30) days.

(b) If the Company is unable to read its purchase meter for any reason, the Seller's production may be estimated by the Company on the basis of the Seller's production during the most recent preceding billing period for which readings were obtained, unless some unusual condition is known to exist. A bill or payment rendered on the basis of such estimate shall be as valid as if made from actual meter readings.

(c) The term "Month" or "Monthly", as used in the Company's Schedules and Riders, refers to the period of time between the regular meter readings by the Company, except that if the period covered by an initial or final bill, or due to rerouting of the meter reading schedule, is more than 35 or less than 25 days, the bill will be prorated based on a 30-day billing month.

(d) Payments for capacity and/or energy will be made to the Seller based on the rate schedule stated in the Purchase Power Agreement.

(e) The Company reserves the right to set off against any amounts due from the Company to Seller, any amounts which are due from Seller to the Company, including, but not limited to, unpaid charges pursuant to the Interconnection Agreement or past due balances on any accounts the Seller has with the Company for other services.

10. RECORDS

In addition to the regular meter readings to be taken monthly for billing purposes, the Company may require additional meter readings, records, transfer of information, etc. as may be agreed upon by the Parties. The Company reserves the right to provide to the Commission or the FERC or any other regulatory body, upon request, information pertaining to this Agreement, including but not limited to: records of the Facility's generation output and the Company's purchases thereof (including copies of monthly statements of power purchases and data from load recorders and telemetering installed at the Facility); copies of this Agreement. The Company will not provide any information developed solely by the Seller and designated by the Seller in writing to be "proprietary" unless required to do so by order of the Commission or the FERC or any other regulatory body or court, in which event, the Company will notify the Seller prior to supplying the proprietary information. The Seller shall provide to the Company, on a monthly basis within ten (10) days of the meter reading date and in form to be mutually agreed upon by the Parties, information on the Facility's fuel costs (coal, oil, natural gas, supplemental firing, etc.), if any, for the power delivered to the Company during the preceding month's billing period.

11. METER STOPPAGE OR ERROR

In the event a meter fails to register accurately within the allowable limits established by the state regulatory body having jurisdiction, the Company will adjust the measured energy for the period of time the meter was shown to be in error, and shall, as provided in the rules and regulations of the state regulatory body having jurisdiction, pay to the Seller, or the Seller shall refund to the Company, the difference between the amount billed and the estimated amount which would have been billed had the meter accurately registered the kilowatt hours provided by the Seller. No part of any minimum service charge shall be refunded.

12. POINT OF DELIVERY

The point of delivery is the point where the Company's conductors are, or are to be, connected to Seller's conductors. The Seller shall do all things necessary to bring its conductors to such point of delivery for connection to the Company's conductors, and shall maintain said conductors in good order at all times. If the Seller chooses to deliver power to the Company through a point of delivery where the Seller presently receives power from the Company, then the point of delivery for the purchase of generation shall be the same point as the point of delivery for electric service.

13. INTERCONNECTION FACILITIES

If the Seller is not subject to the terms and conditions of the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections as approved in Docket No. 2015-362-E, the following conditions shall apply to Interconnection Facilities necessary to deliver the Seller's electricity to the Company. Otherwise, the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections in Docket No. 2015-362-E govern.

(a) By Company: The Company shall install, own, operate, maintain, and otherwise furnish all lines and equipment located on its side of the point of delivery to permit parallel operation of the Seller's facilities with the Company's system. It shall also install and own the necessary metering equipment, and meter transformers, where necessary, for measuring the electricity delivered to the Company, though such meter may be located on the Seller's side of the point of delivery. Interconnection facilities, installed by either the Company or the Seller, solely for such purpose, include, but are not limited to connection, line extension, transformation, switching equipment, protective relaying, metering, telemetering, communications, and appropriate safety equipment.

Any interconnection facilities installed by the Company necessary to receive power from the Seller shall be considered additional facilities and shall be provided, if the Company finds it practicable, under the following conditions:

(1) The facilities will be of a kind and type normally used by or acceptable to the Company and will be installed at a place and in a manner satisfactory to the Company.

(2) Seller will pay to Company a Monthly Interconnection Facilities Charge of 1.7 percent of the estimated original installed cost and rearrangement cost of all facilities, including metering, required to accept interconnection, but not less than $25 per month; however, the $25 minimum will not apply with the Interconnection Facilities consist only of the meter. The monthly charge for the Interconnection Facilities to be provided under this Agreement is subject to the rates, Service Regulations and conditions of the Company as the same are now on file with the Commission and may be changed or modified from time to time upon approval by the Commission. Any such changes or modifications, including those which may result in increased charges for the Interconnection Facilities to be provided by the Company, shall be made a part of this Agreement to the same effect as if fully set forth herein.

(3) If the Company increases its investment, other than replacement of existing equipment with equipment of equal capacity and kind, in interconnection facilities or other special facilities required by Seller (including conversion of the Company's primary voltage to a higher voltage), the Monthly Interconnection Facilities Charge for providing the interconnection facilities will be adjusted at that time. The Seller may terminate the interconnection facilities in accordance with the applicable termination paragraph 1 above, or continue the interconnection facilities under the changed conditions.

(4) In lieu of the Monthly Interconnection Facilities Charge of 1.7 percent, the Seller may elect to make a contribution equal to the total interconnection facilities investment, plus associated tax gross-ups. In lieu of the monthly charge above, at the Company's option, the Customer may elect to be billed under an alternative payment option to the 1.7 percent per month. Under such option, the payment must be renewed after each thirty (34) year period.

(5) The Monthly Interconnection Facilities Charge as determined shall continue regardless of the term of the Agreement until the Seller no longer has need for such facilities. In the event the Seller's interconnection facilities should be discontinued or terminated in whole or in part, such discontinuation or termination should be calculated in accordance with 1, above.

(6) The Seller's wiring and appurtenant structures shall provide for the location, connection, and installation of the Company's standard metering equipment or other equipment deemed necessary by the Company for the metering of the Seller's electrical output. The Company shall, at its expense, be permitted to install, in the Seller's wiring or equipment, any special metering devices or equipment as deemed necessary for experimental or monitoring purposes.

(7) The Company shall furnish and install the Interconnection Facilities no later than the date requested by the Seller for such installation. Seller's obligation to pay the Interconnection Facilities charges shall begin upon the earlier of (1) completion of the installation but no earlier than the requested in-service date specified in the Interconnection Agreement or (2) the date where energy is generated and delivered to the Company and such charges shall apply at all times thereafter during the term of this Agreement, whether or not the Seller is actually supplying electric power to the Company.

(b) By Seller: The Seller shall install, own, operate, and maintain all lines, and equipment, exclusive of the Company's meter and meter transformers, on the Seller's side of the point of delivery. The Seller will be the owner and have the exclusive control of, and responsibility for, all electricity on Seller's side of the point of delivery. The Seller must conform to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. The Seller's wiring shall be arranged such that all electricity generated for sale can be supplied to one point of delivery and measured by a single meter. The Company's meter may be located on the Seller's side of the point of delivery, and when it is to be so located, the Seller must make suitable provisions in the Seller's wiring, at a place suitable to the Company, for the convenient installation of the type of meter the Company will use. All of the Seller's conductors installed on the Company's side of the meter and not installed in conduit must be readily visible.

The Seller shall install and maintain devices adequate to protect the Seller's equipment against irregularities on the Company's system, including devices to protect against single-phasing. The Seller shall also install and maintain such devices as may be necessary to automatically disconnect the Seller's generating equipment, which is operated in parallel with the Company, when service provided by the Seller is affected by electrical disturbances on the Company's or the Seller's systems, or at any time when the Company's system is de-energized from its prime source.

(c) Access to Premises: The duly authorized agents of the Company shall have the right of ingress and egress to the premises of the Seller at all reasonable hours for the purpose of reading meters, inspecting the Company's wiring and apparatus, changing, exchanging, or repairing the Company's property on the premises of the Seller, or removing such property at the time of or at any time after suspension of purchases or termination of this Agreement.

(d) Protection: The Seller shall protect the Company's wiring and apparatus on the Seller's premises and shall permit no one but the Company's agents to handle same. In the event of any loss of or damage to such property of the Company caused by or arising out of carelessness, neglect, or misuse by the Seller or the Seller's employees or agents, the cost of making good such loss or repairing such damage shall be paid by the Seller. In cases where the Company's service facilities on the Seller's premises require abnormal maintenance due to the Seller's operation, the Seller shall reimburse the Company for such abnormal maintenance cost.

14. CONTINUANCE OF PURCHASES AND LIABILITY THEREFOR

The Parties do not guarantee continuous service but shall use reasonable diligence at all times to provide for uninterrupted acceptance and supply of electricity. Each Party shall at all times use reasonable diligence to provide satisfactory service for the acceptance or supply of electricity, and to remove the cause or causes in the event of failure, interruption, reduction or suspension of service for the acceptance or supply of electricity, but neither Party shall be liable for any loss or damage resulting from such failure, interruption, reduction or suspension of service, nor shall same be a default hereunder, when any interruption of service for the acceptance or supply of electricity is due to any of the following:

(a) An emergency condition or action due to an adverse event and/or condition or disturbance on the Company's system, or on any other system directly or indirectly interconnected with it, which requires automatic or manual interruption of the supply of electricity to some customers or areas or automatic or manual interruption, reduction, or cessation of the acceptance of electricity into the Company's electrical system in order to limit the occurrence of or extent or damage of the adverse condition or disturbance to the Company's system or capability to reliably provide service in compliance and accordance with prudent practices, regulatory requirements, and/or reliability standards, or to prevent damage to generating or transmission facilities, or to expedite restoration of service, or to effect a reduction in service to compensate for an emergency condition on an interconnected system. An emergency condition or action shall include any circumstance that requires action by the Company to comply with any electric reliability organization or NERC/SERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to the Seller's Facility, reliability impairment, loss or damage to the Company's system, disruption of generation by the Seller, disruption of reliability or service on the Company's system, an abnormal condition on the system, and/or endangerment to human life or safety.

(b) An event or condition of force majeure, as described below.

(c) Making necessary adjustments to, changes in, or repairs on the Company lines, substations, and facilities, and in cases where, in its opinion, the continuance of service from Seller's premises would endanger persons or property.

The Seller shall be responsible for promptly taking all actions requested or required by the Company to avoid, prevent, or recover from the occurrence and/or imminent occurrence of any emergency condition and in response to any emergency condition or condition of force majeure, including without limitation installing and operating any equipment necessary to take such actions.

The Seller shall be responsible for insuring the safe operation of its equipment at all times, and will install and maintain, to the Company's satisfaction, the necessary automatic equipment to prevent the backfeed of power into, or damage to the Company's de-energized system, and shall be subject to immediate disconnection of its equipment from the Company's system if the Company determines that such equipment is unsafe or adversely affects the Company's transmission/distribution system or service to its other customers.

The Seller assumes responsibility for and shall indemnify, defend, and save the Company harmless against all liability, claims, judgments, losses, costs, and expenses for injury, loss, or damage to persons or property including personal injury or property damage to the Seller or the Seller's employees on account of defective construction, wiring, or equipment, or improper or careless use of electricity, on the Seller's side of the point of delivery.

15. FORCE MAJEURE

Circumstances beyond the reasonable control of a Party which solely cause that Party to experience delay or failure in delivering or receiving electricity or in providing continuous service hereunder, including: acts of God; unusually severe weather conditions; earthquake; strikes or other labor difficulties; war; riots; fire; requirements shall be deemed to be "events or conditions of force majeure". It also includes actions or failures to act on the part of governmental authorities (including the adoption or change in any rule or regulation or environmental constraints lawfully imposed by federal, state or local government bodies), but only if such requirements, actions or failures to act prevent or delay performance; or transportation delays or accidents. Events or conditions of force majeure do not include such circumstances which merely affect the cost of operating the Facility.

Neither Party shall be responsible nor liable for any delay or failure in its performance hereunder due solely to events or conditions of force majeure, provided that:

(a) The affected Party gives the other Party written notice describing the particulars of the event or condition of force majeure, such notice to be provided within forty-eight (48) hours of the determination by the affected Party that an event or condition of force majeure has occurred, but in no event later than thirty (30) days from the date of the occurrence of the event or condition of force majeure;

(b) The delay or failure of performance is of no longer duration and of no greater scope than is required by the event or condition of force majeure, provided that in no event shall such delay or failure of performance extend beyond a period of twelve (12) months;

(c) The affected Party uses its best efforts to remedy its inability to perform;

(d) When the affected Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party prompt written notice to that effect; and,

(e) The event or condition of force majeure was not caused by or connected with any negligent or intentional acts, errors, or omissions, or failure to comply with any law, rule, regulation, order or ordinance, or any breach or default of this Agreement.

16. INSURANCE

The Seller shall obtain and retain, for as long as the generation is interconnected with the Company's system, either the applicable home owner's insurance policy with liability coverage of at least $100,000 per occurrence or the applicable comprehensive general liability insurance policy with liability coverage in the amount of at least $300,000 per occurrence, which protects Seller from claims for bodily injury and/or property damage. This insurance shall be primary for all purposes. Seller shall provide certificates evidencing this coverage as required by the Company. The Company reserves the right to refuse to establish, or continue the interconnection of the Seller's generation with the Company's system, if such insurance is not in effect.

17. GOVERNMENTAL RESTRICTIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either party or over this Agreement. This Agreement shall not become effective until all required governmental authorizations are obtained. Certification of receipt of all permits and authorizations shall be furnished by the Seller to the Company upon the Company's request. This Agreement shall not become effective unless it and all provisions thereof are authorized and permitted by such governmental agencies without change or conditions.

This Agreement shall at all times be subject to changes by such governmental agencies, and the parties shall be subject to conditions and obligations, as such governmental agencies may, from time to time, direct in the exercise of their jurisdiction, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract. Both parties agree to exert their best efforts to comply with all of the applicable rules and regulations of all governmental agencies having control over either party or this Agreement. The parties shall take all reasonable action necessary to secure all required governmental approval of this Agreement in its entirety and without change.

The delivery date, quantity, and type of electricity to be accepted for purchase by the Company, from the Seller, are subject to changes, restrictions, curtailments, or complete suspensions by the Company as may be deemed by it to be necessary or advisable (a) on account of any lawful order or regulation of any municipal, State, or Federal government or agency thereof, or order of any court of competent jurisdiction, or (b) on account of any emergency due to war, or catastrophe, all without liability on the part of the Company therefor.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution systems. Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "MONTHLY RATE" section of this schedule.

APPLICABILITY

This Schedule is applicable to all electric energy and capacity supplied by Eligible Qualifying Facility to Company at one point of delivery through Company's metering facilities.

MONTHLY RATE

Monthly Payment

Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company at the Credits set forth below as applicable. Such payments shall be reduced by ~~both~~ the Seller Charge, Integration Services Charge and any applicable Interconnection Cost. Payments to Qualifying Facilities with Contract Capacities of 10 kW or less shall only be made on a calendar year basis.

Seller Charge

An Eligible Qualifying Facility shall pay to Company a Seller Charge outlined below in accordance with the Contract Capacity specified in the Purchase Power Agreement between Company and Seller:

Monthly Seller Charge	$8.05

Integration Services Charge

Due to incremental operations costs incurred with intermittent generation resources, Seller shall pay an integration services charge (the "Integration Services Charge"), which currently applies only to solar photo-voltaic generation facilities. The Charge shall apply to solar photo-voltaic Eligible Qualifying Facilities that either establish a Legally Enforceable Obligation or renew, or otherwise extend, a Purchased Power Agreement on or after November 30, 2018, including all Sellers served under Variable rates. This Integration Services Charge shall be in the amount specified below and will be billed monthly based upon generated energy delivered to the Company.

Integration Services Charge:	$0.00239 per kWh

Energy and Capacity Credits

Eligible Qualifying Facilities eligible for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credits will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. Company shall pay a Capacity Credit based on the on-peak kWh supplied by the Eligible Qualifying Facility based upon the season.

~~Credits for Facilities Interconnected to Company's Distribution System:~~

	~~Variable Credit~~	~~Fixed Long Term Credits 5-Year~~	~~10-Year~~
~~Energy Credits~~			
~~On-peak kWh (¢/kWh)~~	~~3.89~~	~~3.97~~	~~4.71~~
~~Off-peak kWh (¢/kWh)~~	~~3.46~~	~~3.56~~	~~4.15~~
~~Capacity Credits~~			
~~On-peak kWh (¢/kWh) - Summer[1]~~	~~5.74~~	~~5.94~~	~~6.27~~
~~On-peak kWh (¢/kWh) – Non-Summer[1]~~	~~2.22~~	~~2.30~~	~~2.43~~

~~Credits for Facilities Interconnected to Company's Transmission System:~~

	~~Variable Credit~~	~~Fixed Long Term Credits 5-Year~~	~~10-Year~~
~~Energy Credits~~			
~~On-peak kWh (¢/kWh)~~	~~3.80~~	~~3.88~~	~~4.60~~
~~Off-peak kWh (¢/kWh)~~	~~3.42~~	~~3.52~~	~~4.10~~
~~Capacity Credits~~			
~~On-peak kWh (¢/kWh) - Summer[1]~~	~~5.61~~	~~5.81~~	~~6.13~~
~~On-peak kWh (¢/kWh) – Non-Summer[1]~~	~~2.17~~	~~2.25~~	~~2.37~~

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5~~10~~ years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5~~10~~ years)	Fixed Long-Term Rate (10 years)
Energy Credit (¢/kWh)[1]						
a. On-peak kWh Summer	3.60	3.29	3.31	3.51	3.22	3.24
On-peak kWh NonSummer						
1. Morning Hours	3.83	3.78	3.78	3.77	3.72	3.72
2. Evening Hours	3.44	3.32	3.40	3.39	3.27	3.35
b. Off-peak kWh Summer	2.95	2.74	2.71	2.91	2.71	2.68
Off-peak kWh NonSummer	2.77	2.58	2.49	2.74	2.55	2.46

Capacity Credits Based (¢/kWh)[2]

On-Peak kWh Winter Morning	5.94	9.66	11.15	5.82	9.48	10.94
On-peak kWh Winter Evening	2.54	4.14	4.78	2.50	4.06	4.69

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[1] For Energy Credit purposes, Summer months are defined as calendar months May through September and NonSummer months are defined as calendar months October through April. Summer on-peak hours shall be Monday through Friday from 1:00 p.m. to 12:00 a.m. midnight. NonSummer on-peak hours shall be Monday through Friday with morning hours from 5:00 a.m. to 9:00 a.m. plus evening hours from 5:00 p.m. to 12:00 a.m. midnight. All other hours, plus the following holidays, shall be off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When a holiday falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

[2] Capacity Credit shall be applicable in Winter months only, defined as the calendar months of December through March. Winter morning on-peak hours shall be all Winter days from 6:00 a.m. to 9:00 a.m. Winter evening on-peak hours shall be Winter days from 6:00 p.m. to 9:00 p.m. Capacity credits are not applicable in all other months.

~~[1] Summer months are defined as the calendar months of June through September. All other months are Non-Summer for purposes of applying the capacity credits.~~

POWER FACTOR CORRECTION

Unless Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when Seller consumes VARs supplied by the Company or Seller delivers VARs to Company, the monthly bill will be increased by a sum equal to $0.30 multiplied by the maximum consumed or supplied reactive kilovolt-amperes (kVAR) registered by a demand meter suitable for measuring the demand used during a 15-minute interval. The Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of the Company.

RATE UPDATES

The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings.

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions.

~~DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS~~

~~The on-peak and off-peak hours by summer and non-summer month are defined by calendar month as follows:~~

~~TOU Season~~	~~Summer Calendar Months of June through September~~	~~Non-Summer Calendar Months of October through May~~
~~On-peak Hours~~	~~Hours between 1:00 p.m. and 9:00 p.m., Monday through Friday, excluding holidays[+] considered as off-peak.~~	~~Hours between 6:00 a.m. and 1:00 p.m., Monday through Friday, excluding holidays[+] considered as off-peak.~~
~~Off-peak Hours~~	~~The off-peak hours in any month are defined as all hours not specified above as on-peak hours.~~	

~~[+] All hours for the following holidays will be considered as off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When one of the above holidays falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.~~

RENEWABLE ENERGY CREDITS

Unless otherwise specified in Company's agreements with Seller, the sale of power under this schedule does not convey to Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

PAYMENTS

Credit billings to Seller shall be payable to the Seller within fifteen (15) days of the date of the bill. Bills under this Schedule are due and payable on the date of the bill. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a 1.5% late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

CONTRACT PERIOD

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

INTERCONNECTION FACILITIES COSTS

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the $25 minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of the Seller's generation to the Company's system shall be in accordance with the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections.

~~Supersedes Schedule CSP-30B~~

~~Effective for energy and capacity billed on and after July 1, 2016~~

~~SCPSC Docket No. 1995-1192-E, Order No. 2016-349~~

PURCHASED POWER SCHEDULE PP-5

AVAILABILITY

Upon Seller's completion and Company's acceptance of a Purchase Power Agreement, this Schedule is available for electrical energy and capacity supplied by Eligible Qualifying Facilities (as defined below) to Company, provided Seller is a Qualifying Facility as defined by the Federal Energy Regulatory Commission's (FERC) Order No. 70 under Docket No. RM79-54 and 18 C.F.R. §§ 292.203, 292.204, and 292.205. This Schedule is not available for electric service supplied by Company to Seller or to Seller who has negotiated rate credits or conditions with Company which are different from those below. This Schedule is not available to a Qualifying Facility owned by a Seller or affiliate or partner of a Seller, who sells power to the Company from another Qualifying Facility of the same energy resource located within one-half mile, as measured from the electrical generating equipment, unless the combined capacity is equal to or less than two (2) megawatts.

Service necessary for the delivery of power from the Seller's generating facilities into Company's system shall be furnished solely to the individual contracting Seller in a single enterprise, located entirely on a single, contiguous premise. Service hereunder shall be restricted to Company's purchase of energy or energy and capacity from the Seller's generating facilities up to the Contract Capacity specified in the Purchase Power Agreement which may be operated in parallel with Company's system. Power delivered to Company under this Schedule shall not offset or be substituted for power contracted for or which may be contracted for under any other schedule of Company. If Seller requires supplemental, back-up, or standby services, Seller shall enter into a separate service agreement with Company in accordance with Company's applicable electric rates, riders, and Service Regulations on file with and authorized by the state regulatory agency having jurisdiction.

All qualifying facilities have the option to sell energy to the Company on an "as available" basis and receive energy credits only calculated using the Variable Rates identified in this Schedule for the delivered energy. The Variable Energy Credit shall constitute the "as available" avoided cost credit for Non-Eligible Qualifying Facilities. The Fixed Long Term Credit rates on this schedule are available only to otherwise eligible Sellers that establish a Legally Enforceable Obligation on or before the filing date of proposed rates in the next avoided cost proceeding, provided eligible Seller begins delivery of power no later than thirty (30) months from the date of the order approving the avoided cost rates set forth below, but may be extended beyond 30 months if construction is nearly complete and Seller demonstrates that it is making a good faith effort to complete its project in a timely manner.

Sellers not qualifying for the Fixed Long-Term Credit rates remain eligible for the Variable Credit rates or the Fixed Long-Term Credit rates proposed in the next avoided cost proceeding, which will be subject to adjustment if different rates are approved by the Public Service Commission of South Carolina ("Commission") in that proceeding.

Qualifying Facilities Eligible for Capacity and/or Energy Credits

In order to be an Eligible Qualifying Facility and receive Energy Credits under this Schedule, the Qualifying Facility must be a hydroelectric or a generator fueled by trash or methane derived from landfills, solar, wind, hog or poultry waste-fueled or non-animal biomass-fueled Qualifying Facility with a Contract Capacity of two (2) megawatts or less, based on the nameplate rating of the generator, which are interconnected directly with the Company's system and which are Qualifying Facilities as defined by the Federal Energy Regulatory Commission pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978.

Capacity Credits are limited to Eligible Qualifying Facilities located within Company's service area that are classified as New Capacity in accordance with FERC Order No. 69 under Docket No. RM79-55 and interconnected to Company's transmission or distribution systems. Eligible Qualifying Facilities receiving Capacity Credits under this Schedule shall also receive corresponding Energy Credits of like term as set forth in the "MONTHLY RATE" section of this schedule.

APPLICABILITY

This Schedule is applicable to all electric energy and capacity supplied by Eligible Qualifying Facility to Company at one point of delivery through Company's metering facilities.

MONTHLY RATE

Monthly Payment

Company shall pay Eligible Qualifying Facilities for energy and/or capacity furnished to Company at the Credits set forth below as applicable. Such payments shall be reduced by \the Seller Charge, Integration Services Charge and any applicable Interconnection Cost. Payments to Qualifying Facilities with Contract Capacities of 10 kW or less shall only be made on a calendar year basis.

Seller Charge

An Eligible Qualifying Facility shall pay to Company a Seller Charge outlined below in accordance with the Contract Capacity specified in the Purchase Power Agreement between Company and Seller:

Monthly Seller Charge	$8.05

Integration Services Charge

Due to incremental operations costs incurred with intermittent generation resources, Seller shall pay an integration services charge (the "Integration Services Charge"), which currently applies only to solar photo-voltaic generation facilities. The Charge shall apply to solar photo-voltaic Eligible Qualifying Facilities that either establish a Legally Enforceable Obligation or renew, or otherwise extend, a Purchased Power Agreement on or after November 30, 2018, including all Sellers served under Variable rates. This Integration Services Charge shall be in the amount specified below and will be billed monthly based upon generated energy delivered to the Company.

Integration Services Charge:	$0.00239 per kWh

Energy and Capacity Credits

Eligible Qualifying Facilities eligible for Company's Fixed Long-Term and/or Variable Energy and Capacity Credits shall be paid based upon the Seller's interconnection with Company's distribution or transmission system for all energy delivered to Company's system as registered or computed from Company's metering facilities. The Energy and Capacity Credits will be in accordance with the length of rate term for energy sales so established in the Purchase Power Agreement. Company shall pay a Capacity Credit based on the on-peak kWh supplied by the Eligible Qualifying Facility based upon the season.

	Interconnected to Distribution			Interconnected to Transmission		
	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)	Variable Rate	Fixed Long-Term Rate (5 years)	Fixed Long-Term Rate (10 years)
Energy Credit (¢/kWh)[1]						
a. On-peak kWh Summer	3.60	3.29	3.31	3.51	3.22	3.24
On-peak kWh NonSummer						
1. Morning Hours	3.83	3.78	3.78	3.77	3.72	3.72
2. Evening Hours	3.44	3.32	3.40	3.39	3.27	3.35
b. Off-peak kWh Summer	2.95	2.74	2.71	2.91	2.71	2.68
Off-peak kWh NonSummer	2.77	2.58	2.49	2.74	2.55	2.46

Capacity Credits Based (¢/kWh)[2]

On-Peak kWh Winter Morning	5.94	9.66	11.15	5.82	9.48	10.94
On-peak kWh Winter Evening	2.54	4.14	4.78	2.50	4.06	4.69

[1] For Energy Credit purposes, Summer months are defined as calendar months May through September and NonSummer months are defined as calendar months October through April. Summer on-peak hours shall be Monday through Friday from 1:00 p.m. to 12:00 a.m. midnight. NonSummer on-peak hours shall be Monday through Friday with morning hours from 5:00 a.m. to 9:00 a.m. plus evening hours from 5:00 p.m. to 12:00 a.m. midnight. All other hours, plus the following holidays, shall be off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. When a holiday falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

[2] Capacity Credit shall be applicable in Winter months only, defined as the calendar months of December through March. Winter morning on-peak hours shall be all Winter days from 6:00 a.m. to 9:00 a.m. Winter evening on-peak hours shall be Winter days from 6:00 p.m. to 9:00 p.m. Capacity credits are not applicable in all other months.

POWER FACTOR CORRECTION

Unless Seller is required by an Operating Agreement to adjust VAR production to support voltage control, when Seller consumes VARs supplied by the Company or Seller delivers VARs to Company, the monthly bill will be increased by a sum equal to $0.30 multiplied by the maximum consumed or supplied reactive kilovolt-amperes (kVAR) registered by a demand meter suitable for measuring the demand used during a 15-minute interval. The Company reserves the right to install facilities necessary for the measurement of power factor and to adjust the Interconnection Facilities Charge accordingly, solely at the option of the Company.

RATE UPDATES

The Credits and Seller Charge of this Schedule will be updated every two years. Sellers who have contracted for the Fixed Long-Term Energy and Capacity Credits will not be affected by updates in the Energy and Capacity Credits until their rate term expires. For all Qualifying Facilities selling to Company pursuant to the Variable Capacity Credit provisions of this schedule, such capacity credits shall be updated and changed in accordance with the Commission's revisions to such credits in Company's biennial avoided cost proceedings.

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with the Variable or Long-Term rates selected by Seller in Company's Schedule PP and the Terms and Conditions for the Purchase of Electric Power. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of the Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part of the Agreement as though fully written herein, and shall nullify any prior provision in conflict therewith. Any change to the Rate Schedule or Terms and Conditions shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges, and all non-rate provisions.

RENEWABLE ENERGY CREDITS

Unless otherwise specified in Company's agreements with Seller, the sale of power under this schedule does not convey to Company the right to renewable energy credits (RECs) or green tags associated with the energy delivered.

CONTRACT CAPACITY

The Contract Capacity shall be as specified in the Purchase Power Agreement between Company and Seller. Only one such Standard Contract shall be permitted for any Qualifying Facility.

PAYMENTS

Credit billings to Seller shall be payable to the Seller within fifteen (15) days of the date of the bill. Bills under this Schedule are due and payable on the date of the bill. Bills are past due and delinquent on the fifteenth day after the date of the bill. If any bill is not so paid, the Company has the right to suspend service. In addition, all bills not paid by the twenty-fifth day after the date of the bill shall be subject to a 1.5% late payment charge on the unpaid amount. This late payment charge shall be rendered on the following month's bill and it shall become part of and be due and payable with the bill on which it is rendered.

CONTRACT PERIOD

Each Seller shall enter into a Purchase Power Agreement which shall specify the Contract Capacity committed for delivery throughout the term of the contract and shall specify the initial term and associated rate.

INTERCONNECTION FACILITIES COSTS

For Eligible Qualifying Facilities, the installed costs for all facilities constructed or installed by Company to interconnect and safely operate in parallel with Seller's equipment shall be determined in accordance with Company's Terms and Conditions for the Purchase of Electric Power. When only the installation of Company's meter is required for the purchase of electric power, the $25 minimum monthly Interconnection Facilities Charge shall not be applicable. Interconnection of the Seller's generation to the Company's system shall be in accordance with the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections.

Testimony of Glen A. Snider
Confidential Exhibit 3

Duke Energy Progress, LLC

Supporting Calculations
(filed under seal)

PURCHASE POWER AGREEMENT

between

DUKE ENERGY PROGRESS, LLC

and

SELLER NAME

"Facility Name" Project

Initial Delivery Date: ______________________

PURCHASE POWER AGREEMENT BY A
QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

THIS PURCHASE POWER AGREEMENT ("Agreement") is made this ________ **day of________________________, 20____**, by and between

DUKE ENERGY PROGRESS, LLC ("Company")

, and

____,

a(n) ________________ ~~Corporation~~[*insert place of formation*] [*insert entity type*] ("Seller" ~~or "Customer"~~), for the

"____," **Project**

~~which~~ Seller hereby certifies that th~~is~~e ~~f~~Facility, as defined below, (is/is not) "new capacity," as defined by the Federal Energy Regulatory Commission (FERC), and that construction of the Facility (was/was not) commenced on or after November 9, 1978 and that the Facility is ~~or will be~~ a qualifying facility as defined by the Federal Energy Regulatory Commission ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978 ~~***[and which is or will be a hydroelectric generating facility owned and operated by a small power producer as defined in G.S. 62-3(27a) - (if applicable)]***~~.~~,~~ The Facility as defined herein (the "Facility")~~consisting of ____ (the "Facility")~~, shall consist of that certain [*insert description of the Facility including fuel type and Nameplate Capacity rating in AC and DC]* which is located at [insert facility address].

(Hereinafter, the parties are also referred to individually as a "Party" and collectively as the "Parties").

In consideration of the mutual covenants herein contained, the Parties hereto, for themselves, their successors and assigns, do hereby agree to the following:

1. Service Requirements

1.1 Seller shall sell and deliver exclusively to Company all of the electric power generated by the Facility, net of the Facility's own auxiliary electrical requirements, and Company shall purchase, receive, use and pay for the same, subject to the conditions contained in this Agreement. Upon the completion of the installation, by Company, of its system upgrades and interconnection facilities at the point of delivery of Seller's and Company's conductors, Seller shall become responsible for the payment to Company of any and all charges that may apply, whether or not Seller actually delivers any electricity to Company. If Seller requests standby, back-up and/or maintenance power for the Facility's auxiliary electrical requirements from Company, such power shall be provided to Supplier pursuant to a separate electric service agreement under Company's rate tariffs appropriate for such service.

1.2 Electricity supplied by Seller shall be [*single (1)/three (3)*] phase, alternating at a frequency of approximately sixty (60) cycles, and at a delivery voltage of approximately ______________ volts, _____ wires at a sufficient power factor to maintain system operating parameters as specified by Company.

1.3 Delivery of said Seller's power shall be at a point of delivery described as follows: ____.

1.4 ~~Based upon the alternating current rating, T~~The Contract Capacity of ~~Seller's generating~~the ~~facility~~Facility, as defined in the Terms and Conditions for the Purchase of Electric Power is _________-AC kW/MW. The ~~and~~ estimated annual energy production of the Facility is ___________ kWh ~~is the amount Seller contracts to deliver to Company and Company agrees to receive~~.

2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Purchased Power Schedule PP-___ *[Variable Rate][5-year Fixed Long-Term Rate], [10-year Fixed Long-Term Rate]~~–~~ for [Distribution][Transmission] Interconnection]* ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the Public Service Commission of South Carolina ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), Integration Services Charge, and all non-rate provisions.

3. Initial Delivery Date

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company, unless otherwise mutually agreed to by the Parties, and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. ~~The~~ Any automatic extension of this Agreement will be at the Variable Rates in effect at the time of extension. Unless otherwise mutually agreed to by the Parties, ~~T~~the term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be _______________, 20__. Company at its sole discretion may terminate this Agreement on _______________, 20__ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner) if Seller is unable to provide generation capacity and energy production consistent with the energy production levels specified in Provision No. ~~2~~ 1.4 above.~~ This date may be extended by upon mutual agreement by both parties.~~

4. __Interconnection Facilities__

Unless otherwise required by Company, an Interconnection ~~a~~Agreement pursuant to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections ~~to interconnect~~ shall be executed by Seller, including any applicable payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. *(Either sentence (a) or (b) as follows is inserted into the agreement as appropriate)* *(a)* The Interconnection Facilities Charge shall be specified in the Interconnection Agreement. or *(b)* The Interconnection Facilities Charge shall be ~~2.0~~1.1% of the installed cost of metering and other equipment and is $______ per month.

5. __Reporting Requirements__

Upon request, facilities ~~larger than 3,000 kW~~ may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the ~~acceptance hereof~~execution by Company and Seller~~, evidenced by the signature of its Presidents, Vice Presidents or Authorized Representatives~~ in the block provided below, this ~~document~~ Agreement together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and delivered to Company~~declared~~ by Seller from ~~its~~ the above-described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:

____

Printed: _____________________________

____

Printed: _____________________________

____, **Seller**

By____

Printed: ____

Title____

This _____ day of ________________________, 20________

ACCEPTED: DUKE ENERGY PROGRESS, LLC

By________________________________

Title________________________________

This_______ day of _____________, 20____

Mail Payment/Bill to:

____

____

____

____

PURCHASE POWER AGREEMENT

between

DUKE ENERGY PROGRESS, LLC

and

SELLER NAME

"Facility Name" Project

Initial Delivery Date: ____________________

PURCHASE POWER AGREEMENT BY A QUALIFYING COGENERATOR OR SMALL POWER PRODUCER

THIS PURCHASE POWER AGREEMENT ("Agreement") is made this ________ **day of**________________________**, 20**____, by and between

DUKE ENERGY PROGRESS, LLC ("Company")

, and

____,

a(n) [*insert place of formation*] [*insert entity type*] ("Seller"), for the

"____," Project

Seller hereby certifies that the Facility, as defined below, (is/is not) "new capacity," as defined by the Federal Energy Regulatory Commission (FERC), and that construction of the Facility (was/was not) commenced on or after November 9, 1978 and that the Facility is a qualifying facility as defined by the Federal Energy Regulatory Commission ("FERC") pursuant to Section 210 of the Public Utility Regulatory Policies Act of 1978**.** The Facility as defined herein (the "Facility"), shall consist of that certain [*insert description of the Facility including fuel type and Nameplate Capacity rating in AC and DC]* which is located at [insert facility address].

(Hereinafter, the parties are also referred to individually as a "Party" and collectively as the "Parties").

In consideration of the mutual covenants herein contained, the Parties hereto, for themselves, their successors and assigns, do hereby agree to the following:

1. Service Requirements

1.1 Seller shall sell and deliver exclusively to Company all of the electric power generated by the Facility, net of the Facility's own auxiliary electrical requirements, and Company shall purchase, receive, use and pay for the same, subject to the conditions contained in this Agreement. Upon the completion of the installation, by Company, of its system upgrades and interconnection facilities at the point of delivery of Seller's and Company's conductors, Seller shall become responsible for the payment to Company of any and all charges that may apply, whether or not Seller actually delivers any electricity to Company. If Seller requests standby, back-up and/or maintenance power for the Facility's auxiliary electrical requirements from Company, such power shall be provided to Supplier pursuant to a separate electric service agreement under Company's rate tariffs appropriate for such service.

1.2 Electricity supplied by Seller shall be [*single (1)/three (3)*] phase, alternating at a frequency of approximately sixty (60) cycles, and at a delivery voltage of approximately _____________ volts, _____ wires at a sufficient power factor to maintain system operating parameters as specified by Company.

1.3 Delivery of said Seller's power shall be at a point of delivery described as follows: ____.

1.4 The Contract Capacity of the Facility, as defined in the Terms and Conditions for the Purchase of Electric Power is _________-AC kW/MW. The estimated annual energy production of the Facility is ___________ kWh.

2. Rate Schedule

The sale, delivery, and use of electric power hereunder, and all services of whatever type to be rendered or performed in connection therewith, shall in all respects be subject to and in accordance with Company's Purchased Power Schedule PP-___ *[Variable Rate][5-year Fixed Long-Term Rate], [10-year Fixed Long-Term Rate] for [Distribution][Transmission] Interconnection]* ("Rate Schedule") and the Terms and Conditions for the Purchase of Electric Power, both of which are now on file with the Public Service Commission of South Carolina ("Commission"), and are hereby incorporated by reference and made a part hereof as though fully set forth herein. Said Rate Schedule and Terms and Conditions for the Purchase of Electric Power are subject to change, revision, alteration or substitution, either in whole or in part, upon order of said Commission or any other regulatory authority having jurisdiction, and any such change, revision, alteration or substitution shall immediately be made a part hereof as though fully written herein, and shall nullify any prior provision in conflict therewith.

The language above beginning with "Said Rate Schedule" shall not apply to the Fixed Long-Term Rates themselves, but it shall apply to all other provisions of the Rate Schedule and Terms and Conditions for the Purchase of Electric Power, including but not limited to Variable Rates, other types of charges (e.g., administrative charges), Integration Services Charge, and all non-rate provisions.

3. Initial Delivery Date

The term of this Agreement shall be a minimum of 5 years when contracting for capacity payments and shall begin upon the first date when energy is generated by the Facility and delivered to Company, unless otherwise mutually agreed to by the Parties, and continuing for the term specified in the Rate Schedule paragraph above and shall automatically extend thereafter unless terminated by either party by giving not less than thirty (30) days prior written notice. Any automatic extension of this Agreement will be at the Variable Rates in effect at the time of extension. Unless otherwise mutually agreed to by the Parties, the term shall begin no earlier than the date Company's Interconnection Facilities are installed and are ready to accept electricity from Seller which is requested to be ________________, 20__. Company at its sole discretion may terminate this Agreement on ________________, 20__ (30 months following the date of the order initially approving the rates selection shown above which may be extended beyond 30 months if construction is nearly complete and the Seller demonstrates that it is making a good faith effort to complete its project in a timely manner) if Seller is unable to provide generation capacity and energy production consistent with the energy production levels specified in Provision No. 1.4 above.

4. Interconnection Facilities

Unless otherwise required by Company, an Interconnection Agreement pursuant to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections shall be executed by Seller, including any applicable payments of all charges and fees associated with the interconnection, before Company will accept this Agreement. *(Either sentence (a) or (b) as follows is inserted into the agreement as appropriate) (a)* The Interconnection Facilities Charge shall be specified in the Interconnection Agreement. or *(b)* The Interconnection Facilities Charge shall be 1.1% of the installed cost of metering and other equipment and is $______ per month.

5. Reporting Requirements

Upon request, facilities may be required to provide prior notice of annual, monthly, and day-ahead forecast of hourly production, as specified by the Company. If the Seller is required to notify the Company of planned or unplanned outages, notification should be made as soon as known. Seller shall include the start time, the time for return to service, the amount of unavailable capacity, and the reason for the outage.

Upon the execution by Company and Seller in the block provided below, this Agreement together with attachments shall become an agreement for Seller to deliver and sell to Company and for Company to receive and purchase from Seller the electricity generated and delivered to Company by Seller from the above described qualifying generating facility at the rates, in the quantities, for the term, and upon the terms and conditions set forth herein.

Witness as to Seller:

____

Printed: ____________________________

____

Printed: ____________________________

____, **Seller**

By____

Printed: ____

Title____

This _____ day of ________________________, 20________

ACCEPTED: DUKE ENERGY PROGRESS, LLC

By________________________________

Title________________________________

This_______ day of _____________, 20____

Mail Payment/Bill to:

____

____

____

____

TERMS AND CONDITIONS FOR THE PURCHASE OF ELECTRIC POWER

1. PURCHASE POWER AGREEMENT

These “Terms and Conditions" provide a mechanism through which Duke Energy Progress, LLC, hereafter called “Company,” will agree to purchase energy or capacity or both from an Eligible Qualifying Facility as defined in the Purchased Power Schedule PP. This Purchase Power Agreement is solely for the purchase of electricity produced by Seller’s generation, net of generator auxiliary requirement, and does not provide for the sale of any electric service by Company to Seller.

(a) Description - The Purchase Power Agreement (hereinafter sometimes termed "Agreement") shall consist of (1) Company’s form of Purchase Power Agreement when signed by Seller and accepted by Company, (2) the applicable Schedule for the purchase of electricity as specified in the Purchase Power Agreement, and (3) these Terms and Conditions for the Purchase of Electric Power (hereinafter referred to as "Terms and Conditions"), and all changes, revisions, alterations therein, or substitutions therefor lawfully made.

(b) Application of Terms and Conditions and Schedules - All Purchase Agreements in effect at the effective date of this tariff or that may be entered into in the future, are made expressly subject to these Terms and Conditions, and subject to all applicable Schedules as specified in the Purchase Power Agreement, and any changes therein, substitutions thereof, or additions thereto lawfully made, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract or by order of the state regulatory authority having jurisdiction (hereinafter “Commission”).

(c) Conflicts - In case of conflict between any provision of a Schedule and of these Terms and Conditions, the provision of the Schedule shall prevail.

(d) Waiver - The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.

(e) Assignment of Agreement - A Purchase Power Agreement between Company and Seller may not be transferred and assigned by Seller to any person, firm, or corporation purchasing or leasing and intending to continue the operation of the plant or business which is interconnected under such Agreement, without~~subject to~~ the prior written approval of Company. ~~Company will grant such approval upon being reasonably satisfied that the assignee will fulfill the terms of the Agreement and if, at the Company’s option, a satisfactory guarantee for the payment of any applicable bills is furnished by assignee.~~ A Purchase Power Agreement shall not be transferred and assigned by Seller to any person, firm, or corporation that is party to any other purchase agreement under which a party sells or seeks to sell power to the Company from another Qualifying Facility that is located within one-half mile, as measured from the electrical generating equipment. Company will not unreasonably withhold consent provided that such assignment does not require any amendment to the terms and conditions of this Agreement, other than the notice provision thereof. Any assignment that Company has not approved in writing shall be null and void and not effective for all purposes~~.~~ However, before such rights and obligations are assigned, the assignee must first obtain necessary approval from all regulatory bodies including, but not limited to, the Commission.

(f) Notification of Assignment, Transfer or Sale - In the event of an assignment of the rights and obligations accruing to Seller under this Agreement, or in the event of any contemplated sale, transfer or assignment of the Facility, the Seller shall, in addition to obtaining the approvals hereof, provide a minimum of 30 days prior written notice advising Company of any plans for such an assignment, sale or transfer.

(g) Suspension of Sales Under Agreement at Seller's Request - If Seller is temporarily unable to produce the electricity contracted for due to physical destruction of, or damage to, his premises, Company will, upon written request of Seller, and for a period Company deems as reasonably required to replace or repair such premises, suspend billing under the Agreement, exclusive of any Monthly Facilities Charges, effective with the beginning of the next sales period.

(h) Termination of Agreement at Seller's Request - If Seller desires to terminate the Agreement, Company will agree to such termination if all bills for services previously rendered to Seller including any termination or other charges applicable under any Interconnection ~~a~~Agreement~~ to interconnect~~, plus any applicable termination charges, have been paid. Termination charges shall consist of any applicable termination charges for premature termination of capacity as set forth in paragraphs 4 and 6 of these Terms and Conditions. Company may waive the foregoing provision if Company has secured or expects to secure from a new occupant or operator of the premises an Agreement satisfactory to Company for the delivery of electricity to Company for a term not less than the unexpired portion of Seller's Agreement.

(i) Company's Right to Terminate or Suspend Agreement - Company, in addition to all other legal remedies, may either terminate the Agreement or suspend purchases of electricity from Seller based on any of the following: (l) ~~for~~ any default or breach of the Agreement by Seller, (2) ~~for~~ any fraudulent or unauthorized use of Company's meter, (3) ~~for~~ failure to pay any applicable bills when due and payable, (4) any material modification to the Facility without the Company's consent or otherwise delivering energy in excess of the estimated annual energy production of the Facility, (5) ~~for~~ ~~a~~any condition on Seller's side of the point of delivery actually known by Company to be, or which Company reasonably anticipates may be, dangerous to life or property, or (~~5~~6) Seller fails to deliver energy to Company for six (6) consecutive months.~~due to Seller's inability to deliver to Company the quality and/or quantity of electricity mutually agreed to in the Purchase Agreement~~ Termination of the Agreement shall be at Company's sole option and is only appropriate when Seller either cannot or will not cure its default.

No such termination or suspension, however, will be made by Company without written notice delivered to Seller, personally or by mail, stating what in particular in the Agreement has been violated, except that no notice need to be given in instances set forth in 1~~.~~(i)(2) or 1(i)(5) above. Company shall give Seller a minimum of thirty (30) calendar days prior written notice before suspending or terminating the Agreement pursuant to provisions 1~~.~~(i)(1), 1(i)(3)-(4)~~, and (5)~~. Company shall give Seller five (5) calendar days prior written notice before suspending or terminating the Agreement pursuant to provision 1~~.~~(i)(~~4~~6).

Failure of Company to terminate the Agreement or to suspend the purchase of electricity at any time after the occurrence of grounds therefor, or to resort to any other legal remedy or to exercise any one or more of such alternative remedies, shall not waive or in any manner affect Company's right later to resort to any one or more of such rights or remedies on account of any such ground then existing or which may subsequently occur.

Any suspension of the purchase of electricity by Company or termination of the Agreement upon any authorized grounds shall in no way operate to relieve Seller of Seller's liability to compensate Company for services and/or facilities supplied, nor shall it relieve Seller (1) of Seller's liability for the payment of minimum monthly charges during the period of suspension, nor (2) of Seller's liability for damages, if the Agreement has been terminated, in the amount of (a) the minimum monthly charges which would have been payable during the unexpired term of the Agreement plus (b) the Early Contract Termination charge as set forth in these Terms and Conditions.

2. CONDITIONS OF SERVICE

(a) Company is not obligated to purchase electricity from Seller unless and until: (1) Company's form of Purchase Power Agreement is executed by Seller and accepted by Company; (2) in cases where it is necessary to cross private property to accept delivery of electricity from Seller, Seller conveys or causes to be conveyed to Company, without cost to Company, a right-of-way easement, satisfactory to Company, across such private property which will provide for the construction, maintenance, and operation of Company's lines and facilities, necessary to receive electricity from Seller; provided, however, in the absence of a formal conveyance, Company nevertheless, shall be vested with an easement over Seller's premises authorizing it to do all things necessary including the construction, maintenance, and operation of its lines and facilities for such purpose; and (3) any inspection certificates or permits that may be required by law in the local area are furnished to Company. Where not required by law, an inspection by a Company-approved inspector shall be made at Seller's expense. In the event Seller is unable to secure such necessary rights of way, Seller shall reimburse Company for all costs Company may incur for the securing of such rights of way.

The obligation of Company in regard to service under the Agreement are dependent upon Company securing and retaining all necessary rights-of-way, privileges, franchises, and permits, for such service. Company shall not be liable to any Seller in the event Company is delayed or prevented from purchasing power by Company failure to secure and retain such rights-of-way, privileges, franchises, and permits.

(b) Seller shall operate its Facility in compliance with all: (i) system operator instructions provided by Company, including any energy storage protocols provided if applicable; (ii) applicable operating guidelines established by the North American Electric Reliability Corporation ("NERC") and (iii) the SERC Reliability Corporation ("SERC") or any successor thereto.

(c) Seller shall submit an Interconnection ~~r~~Request~~ to interconnect~~ as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. Company shall not be required to install facilities to support interconnection of Seller's generation or execute the Purchase Power Agreement until Seller has signed an Interconnection ~~a~~Agreement~~ to interconnect,~~as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections, as may be required by Company.

(d) If electricity is received through lines which cross the lands of the United States of America, a state, or any agency or subdivision of the United States of America or of a state, Company shall have the right, upon 30 days' written notice, to discontinue receiving electricity from any Seller or Sellers interconnected to such lines, if and when (1) Company is required by governmental authority to incur expenses in the relocation or the reconstruction underground of any portion of said lines, unless Company is reimbursed for such expense by Sellers or customers connected thereto, or (2) the right of Company to maintain and operate said lines is terminated, revoked, or denied by governmental authority for any reason.

3. DEFINITIONS

(a) Nameplate Capacity: The term "Nameplate Capacity" shall mean the manufacturer's kW_{AC} nameplate rated output capability of the Facility as measured at the delivery point specified in AC~~generator~~. For multi-unit generator facilities, the "Nameplate Capacity" of the ~~facility~~ Facility shall be the sum of the individual manufacturer's KW_{AC} nameplate rated output capabilities of the generators. The Nameplate Capacity shall also include the DC rating of the Facility. For inverted based generating facilities, the "Nameplate Capacity" shall be the manufacturer's rated kW_{AC} output on the inverters. The Nameplate Capacity shall also include the DC rating of the Facility.

~~(b) Net Capacity: The term "Net Capacity" shall mean the Nameplate Capacity of the Seller's generating facilities, less the portion of that capacity needed to serve the generating facilities' Auxiliary Load.~~

~~(c)~~(b) Auxiliary Load: The term "Auxiliary Load" shall mean power used to operate auxiliary equipment in the ~~facility~~ Facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters).

~~(d)~~(c) Whenever the term "purchase" or "purchase of electricity" is used in these Terms and Conditions or other portions of the Agreement, it shall be construed to refer to the electricity supplied to Company by Seller from the Facility.

~~(e)~~(d) The term "Company's conductors" shall mean Company's wires extending from the point of connection with Company's existing electric system to the point of delivery.

~~(f)~~(e) The term "Seller's conductors" shall mean Seller's wires extending from the point of delivery to the switch box or other point where Seller's circuits connect for the purpose of supplying the electricity produced by Seller.

(f) The term "'interconnection" shall mean the connection of Company's conductors to Seller's conductors.

(g) The term "Facility" shall have the meaning specified in the Purchase Power Agreement.

4. CONTRACT CAPACITY

(a) The Contract Capacity shall be ~~the kW of capacity~~as specified in the Purchase Power Agreement and shall not exceed the capacity specified in the Seller's Interconnection Agreement. . This -term shall mean the maximum continuous electrical output capability expressed on an alternating current basis of the generator(s) at any time, at a power factor of approximately unity, -without consuming VARs supplied by Company, as measured at the Point of Delivery and shall be the maximum kW_{AC} delivered to Company during any billing period. ~~In cases where any change is required in Company's facilities due to the actual capacity delivered exceeding the Contract Capacity or due to Seller requesting an increase in the capacity of Company's facilities, Company may require Seller to execute a new Agreement or amend an existing Agreement, thereby establishing a new Contract Capacity. If Company's facilities cannot be upgraded to accept such actual or requested increase, then upon written notice,~~ Seller shall not exceed the existing Contract Capacity or deliver energy in excess of the estimated annual energy production of the Facility unless and until the increase has been agreed to in an amendment executed by Company and Seller and Seller's facilities have been upgraded to accept the actual or requested increase as may be required by Company in its sole discretion~~such amount in excess thereof as Company determine it is able to accept~~.

(b) Seller shall not change ~~its generating~~the Contract ~~capacity~~ Capacity or contracted estimated annual kWh energy production without adequate notice to Company, and without receiving Company's prior written consent, and such unauthorized increase causes loss of or damage to Company's facilities, the cost of making good such loss or repairing such damage shall be paid by Seller.

(c) Company may require that a new Contract Capacity be determined when it reasonably appears that the capacity of Seller's generating facility or annual energy production will deviate from contracted or established levels for any reason, including, but not limited to, a change in water flow, steam supply, or fuel supply.

(d) Any material modification to the Facility, including without limitation, a change in the AC or DC output capacity of the Facility or the addition of energy storage capability shall require the prior written consent of Company, which may be withheld in Company's sole discretion, and shall not be effective until memorialized in an amendment executed by Company and Seller~~In the event that the~~

~~Contract Capacity is terminated, in whole or in part, prior to the completion of the term of the Agreement, the Seller shall pay to Company a penalty as set forth in paragraph 6, below~~.

5. ~~CONTRACT~~ ESTIMATED ANNUAL ENERGY PRODUCTION

The estimated annual energy production from the Facility~~Contract Energy~~ specified in the Purchase Power Agreement shall be the estimated total annual kilowatt-hours registered or computed by or from Company's metering facilities for each time period during a continuous 12-month interval.

6. EARLY CONTRACT TERMINATION OR INCREASE IN CONTRACT CAPACITY OR CONTRACT ENERGY

~~(b)~~ ~~(a)~~ Early Contract Termination - If Seller terminates the Agreement or if the Agreement is terminated by Company as permitted in Section 1(i) prior to the expiration of the initial (or extended) term of the Purchase Agreement~~, the following payment shall be made to Company by Seller: Early Contract Termination –~~, Seller shall pay to Company the total Energy and/or Capacity credits received in excess of the sum of what would have been received under the Variable Rate for Energy and/or Capacity Credits applicable at the initial term of the contract period and as updated every two years, plus interest. The interest should be the weighted average rate for new debt issued by the Company in the calendar year previous to that in which the Agreement was commenced.

(a)

(b) Increase ~~In~~ in Contract Capacity – Seller may apply to Company to increase the Contract Capacity during the Contract Period and, upon approval by Company and an amendment to implement the change has been executed by Company and Customer, ~~,~~future Monthly Delivered Capacities shall not exceed the revised Contract Capacity. If such increase in Contract Capacity results in additional costs associated with redesign or a resizing of Company's facilities, such additional costs to Seller shall be determined in accordance ~~with~~with the Interconnection A~~a~~greement~~ to interconnect~~. Notwithstanding the foregoing, Company shall not be obligated to accept any increase in Contract Capacity under the rates and terms of the existing Agreement, and, in the Company's sole discretion, may require Seller to enter into a new Power Purchase Agreement.

7. CONTRACT RENEWAL

This Agreement shall be subject to renewal for subsequent term(s) at the option of Company on substantially the same terms and provisions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration the Company's then avoided cost rates and other relevant factors, or (2) set by the Commission.

8. QUALITY OF ENERGY RECEIVED

(a) Seller has full responsibility for the routine maintenance of ~~his~~ its generating and protective equipment to insure that reliable, utility grade electric energy is being delivered to Company.

(b) ~~Seller's~~ The F~~f~~acility shall be operated in such a manner as to generate reactive power as may be reasonably necessary to maintain voltage levels and reactive area support as specified by Company. Any operating requirement is subject to modification or revision if warranted by future changes in the distribution or transmission circuit conditions.

(c) Seller may operate direct current generators in parallel with Company through a synchronous inverter. The inverter installation shall be designed such that a utility system interruption will result in the removal of the inverter infeed into the Company's system. Harmonics generated by a DC generator-inverter combination must not adversely affect Company's supply of electric service to, or the use of electric service by Company's other customers, and any correction thereof is the full responsibility of Seller.

(d) In the event Company determines, based on calculations, studies, analyses, monitoring, measurement or observation, that the output of the Facility will cause or is causing the Company to be unable to provide proper voltage levels to its customers, Seller shall be required to comply with a voltage schedule and/or reactive power output schedule as prescribed by Company.

(e) All material modifications to the Facility shall require the prior written consent from Company, and Seller shall provide Company written notification of any ~~material~~ requested changes to the~~ir~~ Facility~~ generation system~~, support equipment such as inverters, or interconnection facilities as soon as reasonably possible to allow ~~and shall provide~~ Company adequate time to review such requested changes to ensure continued safe interconnection prior to implementation.

(f) Failure of Seller to comply with either (a), (b), (c), (d) or (e) above will constitute grounds for Company to cease parallel operation with Seller's generation equipment and constitute grounds for termination or suspension of the Agreement as set forth under paragraph 1, above.

9. BILLING

(a) Meters will be read and bills rendered monthly. Readings are taken each month at intervals of approximately thirty (30) days.

(b) If Company is unable to read its purchase meter for any reason, Seller's production may be estimated by Company on the basis of Seller's production during the most recent preceding billing period for which readings were obtained, unless some unusual condition is known to exist. A bill or payment rendered on the basis of such estimate shall be as valid as if made from actual meter readings.

(c) The term "Month" or "Monthly", as used in Company's Schedules and Riders, refers to the period of time between the regular meter readings by the Company, except that if the period covered by an initial or final bill, or due to rerouting of the meter reading schedule, is more than 34 or less than 28 days, the bill will be prorated based on a 30-day billing month.

(d) Payments for capacity and/or energy will be made to Seller based on the rate schedule stated in the Purchase Power Agreement.

(e) Company reserves the right to set off against any amounts due from the Company to Seller, any amounts which are due from Seller to Company, including, but not limited to, unpaid charges pursuant to the Interconnection ~~a~~Agreement~~ to interconnect~~ or past due balances on any accounts Seller has with Company for other services.~~ Company shall include a written description of any amounts setoff due from Company to Seller in the applicable monthly bill~~.

10. RECORDS

In addition to the regular meter readings to be taken monthly for billing purposes, Company may require additional meter readings, records, transfer of information, etc. as may be agreed upon by the Parties. Company reserves the right to provide to the Commission or the FERC or any other regulatory body, upon request, information pertaining to this Agreement, including but not limited to: records of the Facility's generation output and Company's purchases thereof (including copies of monthly statements of power purchases and data from load recorders and telemetering installed at the Facility); copies of this Agreement. The Company will not provide any information developed solely by Seller and designated by Seller in writing to be "proprietary" unless ~~expressly~~ required to do so by order of the Commission or the FERC or any other regulatory body or court, in which event, the Company will notify Seller prior to supplying the proprietary information~~. The Company will provide the proprietary information under the applicable procedures of the Commission, the FERC or other regulatory body or court for the submission of proprietary and confidential information, but shall not be required to otherwise defend or support the designation of the information as proprietary. Any and all support,~~

~~defense or justification of the designation of the information as proprietary shall be the sole and exclusive responsibility of Seller~~.

Seller shall provide to Company, on a monthly basis within ten (10) days of the meter reading date and in form to be mutually agreed upon by the Parties, information on the Facility's fuel costs (coal, oil natural gas, supplemental firing, etc.), if any, for the power delivered to Company during the preceding month's billing period.

11. METER STOPPAGE OR ERROR

In the event a meter fails to register accurately within the allowable limits established by the state regulatory body having jurisdiction, Company will adjust the measured energy for the period of time the meter was shown to be in error, and shall, as provided in the rules and regulations of the state regulatory body having jurisdiction, pay to Seller, or Seller shall refund to Company, the difference between the amount billed and the estimated amount which would have been billed had the meter accurately registered the kilowatt hours provided by Seller. No part of any minimum service charge shall be refunded.

12. POINT OF DELIVERY

The point of delivery is the point where Company's conductors are, or are to be, connected to Seller's conductors. Seller shall do all things necessary to bring its conductors to such point of delivery for connection to Company's conductors, and shall maintain said conductors in good order at all times. If Seller chooses to deliver power to Company through a point of delivery where Seller presently receives power from Company, then the point of delivery for the purchase of generation shall be the same point as the point of delivery for electric service.

13. INTERCONNECTION FACILITIES

~~Unless otherwise addressed in a separate agreement to interconnect,~~ If Seller is not subject to the terms and conditions of the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections as approved in Docket No. 2015-362-E, the following conditions shall apply to Interconnection Facilities necessary to deliver Seller's electricity to Company. Otherwise the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections in Docket No. 2015-362-E govern.

(a) By Company: Company shall install, own, operate, maintain, and otherwise furnish all lines and equipment located on its side of the point of delivery to permit parallel operation of the Seller's facilities with the Company's system. It shall also install and own the necessary metering equipment, and meter transformers, where necessary, for measuring the electricity delivered to Company, though such meter may be located on Seller's side of the point of delivery. Interconnection facilities, installed by either Company or Seller, solely for such purpose, include, but are not limited to connection, line extension, transformation, switching equipment, protective relaying, metering, telemetering, communications, and appropriate safety equipment.

Any interconnection facilities installed by Company necessary to receive power from Seller shall be considered extra facilities and shall be provided, if Company finds it practicable, under the following conditions:

(1) The facilities will be of a kind and type normally used by or acceptable to Company and will be installed at a place and in a manner satisfactory to Company.

(2) Seller will pay to Company a Monthly Interconnection Facilities Charge of 1.1 percent of the estimated original installed cost and rearrangement cost of all facilities, including metering, required to accept interconnection, but not less than $25 per month~~.~~. The monthly charge for the Interconnection Facilities to be provided under this Agreement is subject to

the rates, Service Regulations and conditions of the Company as the same are now on file with the Commission and may be changed or modified from time to time upon approval by the Commission. Any such changes or modifications, including those which may result in increased charges for the Interconnection Facilities to be provided by the Company, shall be made a part of this Agreement to the same effect as if fully set forth herein.

(3) If Company increases its investment, other than replacement of existing equipment with equipment of equal capacity and kind, in interconnection facilities or other special facilities required by Seller (including conversion of the Company's primary voltage to a higher voltage), the Monthly Interconnection Facilities Charge for providing the interconnection facilities will be adjusted at that time. Seller may terminate the interconnection facilities in accordance with the applicable termination paragraph 1 above, or continue the interconnection facilities under the changed conditions.

(4) In lieu of the Monthly Interconnection Facilities Charge of 1.1 percent, Seller may elect to make a contribution equal to the total interconnection facilities investment, plus associated tax gross-ups. After such payment, the Monthly Interconnection Facilities Charge for the interconnection facilities will be 0.3 percent of said payment.

(5) The Monthly Interconnection Facilities Charge as determined shall continue regardless of the term of the Agreement until Seller no longer has need for such facilities. In the event Seller's interconnection facilities should be discontinued or terminated in whole or in part, such discontinuation or termination should be calculated in accordance with 1, above.

(6) Seller’s wiring and appurtenant structures shall provide for the location, connection, and installation of Company's standard metering equipment or other equipment deemed necessary by Company for the metering of Seller's electrical output. Company shall, at its expense, be permitted to install, in Seller's wiring or equipment, any special metering devices or equipment as deemed necessary for experimental or monitoring purposes.

(7) Company shall furnish and install the Interconnection Facilities no later than the date requested by Seller for such installation. Seller’s obligation to pay the Interconnection Facilities charges shall begin upon the earlier of (1) completion of the installation but no earlier than the requested in-service date ~~that such~~specified in the Interconnection Agreement or (2) the date where energy is generated and delivered to the Company~~Facilities become operational, except as provided in Paragraph 3.4 hereof,~~ and such charges shall apply at all times thereafter during the term of this Agreement, whether or not Seller is actually supplying electric power to Company.

(b) By Seller: Seller shall install, own, operate, and maintain all lines, and equipment, exclusive of Company's meter and meter transformers, on Seller's side of the point of delivery. Seller will be the owner and have the exclusive control of, and responsibility for, all electricity on Seller's side of the point of delivery. Seller must conform to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections~~any State approved interconnection requirements~~. Seller’s wiring shall be arranged such that all electricity generated for sale can be supplied to one point of delivery and measured by a single meter. Company's meter may be located on Seller’s side of the point of delivery, and when it is to be so located, Seller must make suitable provisions in Seller’s wiring, at a place suitable to Company, for the convenient installation of the type of meter Company will use. All of Seller’s conductors installed on the Company's side of the meter and not installed in conduit must be readily visible.

Seller shall install and maintain devices adequate to protect Seller’s equipment against irregularities on Company's system, including devices to protect against single-phasing. Seller shall also install and maintain such devices as may be necessary to automatically disconnect

Seller's generating equipment, which is operated in parallel with Company, when service provided by Seller is affected by electrical disturbances on Company's or Seller's systems, or at any time when Company's system is de-energized from its prime source.

(c) Access to Premises: The duly authorized agents of Company shall have the right of ingress and egress to the premises of Seller at all reasonable hours for the purpose of reading meters, inspecting Company's wiring and apparatus, changing, exchanging, or repairing Company's property on the premises of Seller, or removing such property at the time of or at any time after suspension of purchases or termination of this Agreement.

(d) Protection: Seller shall protect Company's wiring and apparatus on Seller's premises and shall permit no one but Company's agents to handle same. In the event of any loss of or damage to such property of Company caused by or arising out of carelessness, neglect, or misuse by Seller or Seller's employees or agents, the cost of making good such loss or repairing such damage shall be paid by Seller. In cases where Company's service facilities on Seller's premises require abnormal maintenance due to Seller's operation, Seller shall reimburse Company for such abnormal maintenance cost.

14. CONTINUANCE OF PURCHASES AND LIABILITY THEREFOR

The Parties do not guarantee continuous service but shall use reasonable diligence at all times to provide for uninterrupted acceptance and supply of electricity. Each Party~~They~~ shall at all times use reasonable diligence~~ at all times~~ to provide satisfactory service for the acceptance or supply of electricity, and to remove the cause or causes in the event of failure, interruption, reduction or suspension of service for the acceptance or supply of electricity, but neither Party shall be liable for any loss or damage resulting from such failure, interruption, reduction or suspension of service, nor shall same be a default hereunder, when any interruption of service for the acceptance or supply of electricity is due to any of the following:

(a) An emergency condition or action due to an adverse event and/or condition or disturbance on Company's system, or on any other system directly or indirectly interconnected with it, which requires automatic or manual interruption of the supply of electricity to some customers or areas or automatic or manual interruption, reduction, or cessation of the acceptance of electricity into Company's electrical system in order to limit the occurrence of or extent or damage of the adverse condition or disturbance to Company's system or capability to reliably provide service in compliance and accordance with prudent practices, regulatory requirements, and/or reliability standards, or to prevent damage to generating or transmission facilities, or to expedite restoration of service, or to effect a reduction in service to compensate for an emergency condition on an interconnected system. An emergency condition or action shall include any circumstance that requires action by the Company to comply with any electric reliability organization or NERC/SERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to Seller's Facility, reliability impairment, loss or damage to the Company's system, disruption of generation by the Seller, disruption of reliability or service on the Company's system, an abnormal condition on the system, and/or endangerment to human life or safety

(b) An event or condition of force majeure, as described below.

(c) Making necessary adjustments to, changes in, or repairs on Company lines, substations, and facilities, and in cases where, in its opinion, the continuance of service from Seller's premises would endanger persons or property.

Seller shall be responsible for promptly taking all actions requested or required by Company to avoid, prevent, or recover from the occurrence and/or imminent occurrence of any emergency condition and in response to any emergency condition or condition of force majeure, including without limitation installing and operating any equipment necessary to take such actions.

Seller shall be responsible for insuring the safe operation of ~~his~~ its equipment at all times, and will install and maintain, to Company's satisfaction, the necessary automatic equipment to prevent the back feed of power into, or damage to Company's de-energized system, and shall be subject to immediate disconnection of its equipment from Company's system if Company determines that such equipment is unsafe or adversely affects Company's transmission/distribution system or service to its other customers.

Seller assumes responsibility for and shall indemnify, defend, and save Company harmless against all liability, claims, judgments, losses, costs, and expenses for injury, loss, or damage to persons or property including personal injury or property damage to Seller or Seller's employees on account of defective construction, wiring, or equipment, or improper or careless use of electricity, on Seller's side of the point of delivery.

15. FORCE MAJEURE

Circumstances beyond the reasonable control of a Party which solely cause that Party to experience delay or failure in delivering or receiving electricity or in providing continuous service hereunder, including: acts of God; unusually severe weather conditions; earthquake; strikes or other labor difficulties; war; riots; fire; requirements shall be deemed to be "events or conditions of force majeure". It also includes actions or failures to act on the part of governmental authorities (including the adoption or change in any rule or regulation or environmental constraints lawfully imposed by federal, state or local government bodies), but only if such requirements, actions or failures to act prevent or delay performance; or transportation delays or accidents. Events or conditions of force majeure do not include such circumstances which merely affect the cost of operating the Facility.

Neither Party shall be responsible nor liable for any delay or failure in its performance hereunder due solely to events or conditions of force majeure, provided that:

(a) The affected Party gives the other Party written notice describing the particulars of the event or condition of force majeure, such notice to be provided within forty-eight (48) hours of the determination by the affected Party that an event or condition of force majeure has occurred, but in no event later than thirty (30) days from the date of the occurrence of the event or condition of force majeure;

(b) The delay or failure of performance is of no longer duration and of no greater scope than is required by the event or condition of force majeure, provided that in no event shall such delay or failure of performance extend beyond a period of twelve (12) months;

(c) The affected Party uses its best efforts to remedy its inability to perform;

(d) When the affected Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party prompt written notice to that effect; and,

(e) The event or condition of force majeure was not caused by or connected with any negligent or intentional acts, errors, or omissions, or failure to comply with any law, rule, regulation, order or ordinance, or any breach or default of this Agreement.

16. INSURANCE

Seller shall obtain and retain, for as long as the generation is interconnected with Company's system, either the applicable home owner's insurance policy with liability coverage of at least $100,000 per occurrence or the applicable comprehensive general liability insurance policy with liability coverage in the amount of at least $300,000 per occurrence, which protects Seller from claims for bodily injury and/or property damage. This insurance shall be primary for all purposes. Seller shall provide certificates evidencing this coverage as required by Company. Company reserves the right to refuse to establish, or continue the interconnection of Seller's generation with Company's system, if such insurance is not in effect.

17. GOVERNMENTAL RESTRICTIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either party or over this Agreement. This Agreement shall not become effective until all required governmental authorizations are obtained. Certification of receipt of all permits and authorizations shall be furnished by Seller to Company upon Company's request. This Agreement shall not become effective unless it and all provisions thereof are authorized and permitted by such governmental agencies without change or conditions.

This Agreement shall at all times be subject to changes by such governmental agencies, and the parties shall be subject to conditions and obligations, as such governmental agencies may, from time to time, direct in the exercise of their jurisdiction, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract. Both parties agree to exert their best efforts to comply with all of the applicable rules and regulations of all governmental agencies having control over either party or this Agreement. The parties shall take all reasonable action necessary to secure all required governmental approval of this Agreement in its entirety and without change.

The delivery date, quantity, and type of electricity to be accepted for purchase by Company, from Seller, are subject to changes, restrictions, curtailments, or complete suspensions by Company as may be deemed by it to be necessary or advisable (a) on account of any lawful order or regulation of any municipal, State, or Federal government or agency thereof, or order of any court of competent jurisdiction, or (b) on account of any emergency due to war, or catastrophe, all without liability on the part of the Company therefor.

~~Supersedes: July 1, 2016~~
~~Effective: January 1, 2017~~
~~Docket No. 2016-227-E, Order No. 2016-871~~

TERMS AND CONDITIONS FOR THE PURCHASE OF ELECTRIC POWER

1. PURCHASE POWER AGREEMENT

These "Terms and Conditions" provide a mechanism through which Duke Energy Progress, LLC, hereafter called "Company," will agree to purchase energy or capacity or both from an Eligible Qualifying Facility as defined in the Purchased Power Schedule PP. This Purchase Power Agreement is solely for the purchase of electricity produced by Seller's generation, net of generator auxiliary requirement, and does not provide for the sale of any electric service by Company to Seller.

(a) Description - The Purchase Power Agreement (hereinafter sometimes termed "Agreement") shall consist of (1) Company's form of Purchase Power Agreement when signed by Seller and accepted by Company, (2) the applicable Schedule for the purchase of electricity as specified in the Purchase Power Agreement, and (3) these Terms and Conditions for the Purchase of Electric Power (hereinafter referred to as "Terms and Conditions"), and all changes, revisions, alterations therein, or substitutions therefor lawfully made.

(b) Application of Terms and Conditions and Schedules - All Purchase Agreements in effect at the effective date of this tariff or that may be entered into in the future, are made expressly subject to these Terms and Conditions, and subject to all applicable Schedules as specified in the Purchase Power Agreement, and any changes therein, substitutions thereof, or additions thereto lawfully made, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract or by order of the state regulatory authority having jurisdiction (hereinafter "Commission").

(c) Conflicts - In case of conflict between any provision of a Schedule and of these Terms and Conditions, the provision of the Schedule shall prevail.

(d) Waiver - The failure of either Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement shall not constitute a waiver or relinquishment of any such terms or conditions, but the same shall be and remain at all times in full force and effect.

(e) Assignment of Agreement - A Purchase Power Agreement between Company and Seller may not be transferred and assigned by Seller to any person, firm, or corporation purchasing or leasing and intending to continue the operation of the plant or business which is interconnected under such Agreement, without the prior written approval of Company. A Purchase Power Agreement shall not be transferred and assigned by Seller to any person, firm, or corporation that is party to any other purchase agreement under which a party sells or seeks to sell power to the Company from another Qualifying Facility that is located within one-half mile, as measured from the electrical generating equipment. Company will not unreasonably withhold consent provided that such assignment does not require any amendment to the terms and conditions of this Agreement, other than the notice provision thereof. Any assignment that Company has not approved in writing shall be null and void and not effective for all purposes However, before such rights and obligations are assigned, the assignee must first obtain necessary approval from all regulatory bodies including, but not limited to, the Commission.

(f) Notification of Assignment, Transfer or Sale - In the event of an assignment of the rights and obligations accruing to Seller under this Agreement, or in the event of any contemplated sale, transfer or assignment of the Facility, the Seller shall, in addition to obtaining the approvals hereof, provide a minimum of 30 days prior written notice advising Company of any plans for such an assignment, sale or transfer.

(g) Suspension of Sales Under Agreement at Seller's Request - If Seller is temporarily unable to produce the electricity contracted for due to physical destruction of, or damage to, his premises, Company will, upon written request of Seller, and for a period Company deems as reasonably required to replace or repair such premises, suspend billing under the Agreement, exclusive of any Monthly Facilities Charges, effective with the beginning of the next sales period.

(h) Termination of Agreement at Seller's Request - If Seller desires to terminate the Agreement, Company will agree to such termination if all bills for services previously rendered to Seller including any termination or other charges applicable under any Interconnection Agreement, plus any applicable termination charges, have been paid. Termination charges shall consist of any applicable termination charges for premature termination of capacity as set forth in paragraphs 4 and 6 of these Terms and Conditions. Company may waive the foregoing provision if Company has secured or expects to secure from a new occupant or operator of the premises an Agreement satisfactory to Company for the delivery of electricity to Company for a term not less than the unexpired portion of Seller's Agreement.

(i) Company's Right to Terminate or Suspend Agreement - Company, in addition to all other legal remedies, may either terminate the Agreement or suspend purchases of electricity from Seller based on any of the following: (l) any default or breach of the Agreement by Seller, (2) any fraudulent or unauthorized use of Company's meter, (3) failure to pay any applicable bills when due and payable, (4) any material modification to the Facility without the Company's consent or otherwise delivering energy in excess of the estimated annual energy production of the Facility, (5) any condition on Seller's side of the point of delivery actually known by Company to be, or which Company reasonably anticipates may be, dangerous to life or property, or (6) Seller fails to deliver energy to Company for six (6) consecutive months. Termination of the Agreement shall be at Company's sole option and is only appropriate when Seller either cannot or will not cure its default.

No such termination or suspension, however, will be made by Company without written notice delivered to Seller, personally or by mail, stating what in particular in the Agreement has been violated, except that no notice need to be given in instances set forth in 1(i)(2) or 1(i)(5) above. Company shall give Seller a minimum of thirty (30) calendar days prior written notice before suspending or terminating the Agreement pursuant to provisions 1(i)(1), 1(i)(3)-(4). Company shall give Seller five (5) calendar days prior written notice before suspending or terminating the Agreement pursuant to provision 1(i)(6).

Failure of Company to terminate the Agreement or to suspend the purchase of electricity at any time after the occurrence of grounds therefor, or to resort to any other legal remedy or to exercise any one or more of such alternative remedies, shall not waive or in any manner affect Company's right later to resort to any one or more of such rights or remedies on account of any such ground then existing or which may subsequently occur.

Any suspension of the purchase of electricity by Company or termination of the Agreement upon any authorized grounds shall in no way operate to relieve Seller of Seller's liability to compensate Company for services and/or facilities supplied, nor shall it relieve Seller (1) of Seller's liability for the payment of minimum monthly charges during the period of suspension, nor (2) of Seller's liability for damages, if the Agreement has been terminated, in the amount of (a) the minimum monthly charges which would have been payable during the unexpired term of the Agreement plus (b) the Early Contract Termination charge as set forth in these Terms and Conditions.

2. CONDITIONS OF SERVICE

(a) Company is not obligated to purchase electricity from Seller unless and until: (1) Company's form of Purchase Power Agreement is executed by Seller and accepted by Company; (2) in cases where it is necessary to cross private property to accept delivery of electricity from Seller, Seller conveys or causes to be conveyed to Company, without cost to Company, a right-of-way easement, satisfactory to Company, across such private property which will provide for the construction, maintenance, and operation of Company's lines and facilities, necessary to receive electricity from Seller; provided, however, in the absence of a formal conveyance, Company nevertheless, shall be vested with an easement over Seller's premises authorizing it to do all things necessary including the construction, maintenance, and operation of its lines and facilities for such purpose; and (3) any inspection certificates or permits that may be required by law in the local area are furnished to Company. Where not required by law, an inspection by a Company-approved inspector shall be made at Seller's expense. In the event Seller is unable to secure such necessary rights of way, Seller shall reimburse Company for all costs Company may incur for the securing of such rights of way.

The obligation of Company in regard to service under the Agreement are dependent upon Company securing and retaining all necessary rights-of-way, privileges, franchises, and permits, for such service. Company shall not be liable to any Seller in the event Company is delayed or prevented from purchasing power by Company failure to secure and retain such rights-of-way, privileges, franchises, and permits.

(b) Seller shall operate its Facility in compliance with all: (i) system operator instructions provided by Company, including any energy storage protocols provided if applicable; (ii) applicable operating guidelines established by the North American Electric Reliability Corporation (“NERC”) and (iii) the SERC Reliability Corporation (“SERC”) or any successor thereto.

(c) Seller shall submit an Interconnection Request as set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. Company shall not be required to install facilities to support interconnection of Seller’s generation or execute the Purchase Power Agreement until Seller has signed an Interconnection Agreementas set forth in the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections, as may be required by Company.

(d) If electricity is received through lines which cross the lands of the United States of America, a state, or any agency or subdivision of the United States of America or of a state, Company shall have the right, upon 30 days' written notice, to discontinue receiving electricity from any Seller or Sellers interconnected to such lines, if and when (1) Company is required by governmental authority to incur expenses in the relocation or the reconstruction underground of any portion of said lines, unless Company is reimbursed for such expense by Sellers or customers connected thereto, or (2) the right of Company to maintain and operate said lines is terminated, revoked, or denied by governmental authority for any reason.

3. <u>DEFINITIONS</u>

(a) Nameplate Capacity: The term “Nameplate Capacity” shall mean the manufacturer’s kW_{AC} nameplate rated output capability of the Facility as measured at the delivery point specified in AC. For multi-unit generator facilities, the “Nameplate Capacity” of the Facility shall be the sum of the individual manufacturer’s KW_{AC} nameplate rated output capabilities of the generators. The Nameplate Capacity shall also include the DC rating of the Facility. For inverted based generating facilities, the “Nameplate Capacity” shall be the manufacturer’s rated kW_{AC} output on the inverters. The Nameplate Capacity shall also include the DC rating of the Facility.

(b) Auxiliary Load: The term “Auxiliary Load” shall mean power used to operate auxiliary equipment in the Facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters).

(c) Whenever the term "purchase" or "purchase of electricity" is used in these Terms and Conditions or other portions of the Agreement, it shall be construed to refer to the electricity supplied to Company by Seller from the Facility.

(d) The term "Company's conductors" shall mean Company's wires extending from the point of connection with Company's existing electric system to the point of delivery.

(e) The term "Seller's conductors" shall mean Seller's wires extending from the point of delivery to the switch box or other point where Seller's circuits connect for the purpose of supplying the electricity produced by Seller.

(f) The term "'interconnection" shall mean the connection of Company's conductors to Seller's conductors.

(g) The term "Facility" shall have the meaning specified in the Purchase Power Agreement.

4. CONTRACT CAPACITY

(a) The Contract Capacity shall be as specified in the Purchase Power Agreement and shall not exceed the capacity specified in the Seller's Interconnection Agreement. . This term shall mean the maximum continuous electrical output capability expressed on an alternating current basis of the generator(s) at any time, at a power factor of approximately unity, without consuming VARs supplied by Company, as measured at the Point of Delivery and shall be the maximum kW_{AC} delivered to Company during any billing period. Seller shall not exceed the existing Contract Capacity or deliver energy in excess of the estimated annual energy production of the Facility unless and until the increase has been agreed to in an amendment executed by Company and Seller and Seller's facilities have been upgraded to accept the actual or requested increase as may be required by Company in its sole discretion.

(b) Seller shall not change the Contract Capacity or contracted estimated annual kWh energy production without adequate notice to Company, and without receiving Company's prior written consent, and such unauthorized increase causes loss of or damage to Company's facilities, the cost of making good such loss or repairing such damage shall be paid by Seller.

(c) Company may require that a new Contract Capacity be determined when it reasonably appears that the capacity of Seller's generating facility or annual energy production will deviate from contracted or established levels for any reason, including, but not limited to, a change in water flow, steam supply, or fuel supply.

(d) Any material modification to the Facility, including without limitation, a change in the AC or DC output capacity of the Facility or the addition of energy storage capability shall require the prior written consent of Company, which may be withheld in Company's sole discretion, and shall not be effective until memorialized in an amendment executed by Company and Seller.

5. ESTIMATED ANNUAL ENERGY PRODUCTION

The estimated annual energy production from the Facility specified in the Purchase Power Agreement shall be the estimated total annual kilowatt-hours registered or computed by or from Company's metering facilities for each time period during a continuous 12-month interval.

6. EARLY CONTRACT TERMINATION OR INCREASE IN CONTRACT CAPACITY OR CONTRACT ENERGY

(a) Early Contract Termination - If Seller terminates the Agreement or if the Agreement is terminated by Company as permitted in Section 1(i) prior to the expiration of the initial (or extended) term of the Purchase Agreement, Seller shall pay to Company the total Energy and/or Capacity credits received in excess of the sum of what would have been received under the Variable Rate for Energy and/or Capacity Credits applicable at the initial term of the contract period and as updated every two years, plus interest. The interest should be the weighted average rate for new debt issued by the Company in the calendar year previous to that in which the Agreement was commenced.

(b) Increase in Contract Capacity – Seller may apply to Company to increase the Contract Capacity during the Contract Period and, upon approval by Company and an amendment to implement the change has been executed by Company and Customer, future Monthly Delivered Capacities shall not exceed the revised Contract Capacity. If such increase in Contract Capacity results in additional costs associated with redesign or a resizing of Company's facilities, such additional costs to Seller shall be determined in accordance with the Interconnection Agreement. Notwithstanding the foregoing, Company shall not be obligated to accept any increase in Contract Capacity under the rates and terms of the existing Agreement, and, in the Company's sole discretion, may require Seller to enter into a new Power Purchase Agreement.

7. CONTRACT RENEWAL

This Agreement shall be subject to renewal for subsequent term(s) at the option of Company on substantially the same terms and provisions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration the Company's then avoided cost rates and other relevant factors, or (2) set by the Commission.

8. QUALITY OF ENERGY RECEIVED

(a) Seller has full responsibility for the routine maintenance of its generating and protective equipment to insure that reliable, utility grade electric energy is being delivered to Company.

(b) The Facility shall be operated in such a manner as to generate reactive power as may be reasonably necessary to maintain voltage levels and reactive area support as specified by Company. Any operating requirement is subject to modification or revision if warranted by future changes in the distribution or transmission circuit conditions.

(c) Seller may operate direct current generators in parallel with Company through a synchronous inverter. The inverter installation shall be designed such that a utility system interruption will result in the removal of the inverter infeed into the Company's system. Harmonics generated by a DC generator-inverter combination must not adversely affect Company's supply of electric service to, or the use of electric service by Company's other customers, and any correction thereof is the full responsibility of Seller.

(d) In the event Company determines, based on calculations, studies, analyses, monitoring, measurement or observation, that the output of the Facility will cause or is causing the Company to be unable to provide proper voltage levels to its customers, Seller shall be required to comply with a voltage schedule and/or reactive power output schedule as prescribed by Company.

(e) All material modifications to the Facility shall require the prior written consent from Company, and Seller shall provide Company written notification of any requested changes to the Facility, support equipment such as inverters, or interconnection facilities as soon as reasonably possible to allow Company adequate time to review such requested changes to ensure continued safe interconnection prior to implementation.

(f) Failure of Seller to comply with either (a), (b), (c), (d) or (e) above will constitute grounds for Company to cease parallel operation with Seller's generation equipment and constitute grounds for termination or suspension of the Agreement as set forth under paragraph 1, above.

9. BILLING

(a) Meters will be read and bills rendered monthly. Readings are taken each month at intervals of approximately thirty (30) days.

(b) If Company is unable to read its purchase meter for any reason, Seller's production may be estimated by Company on the basis of Seller's production during the most recent preceding billing period for which readings were obtained, unless some unusual condition is known to exist. A bill or payment rendered on the basis of such estimate shall be as valid as if made from actual meter readings.

(c) The term "Month" or "Monthly", as used in Company's Schedules and Riders, refers to the period of time between the regular meter readings by the Company, except that if the period covered by an initial or final bill, or due to rerouting of the meter reading schedule, is more than 34 or less than 28 days, the bill will be prorated based on a 30-day billing month.

(d) Payments for capacity and/or energy will be made to Seller based on the rate schedule stated in the Purchase Power Agreement.

(e) Company reserves the right to set off against any amounts due from the Company to Seller, any amounts which are due from Seller to Company, including, but not limited to, unpaid charges pursuant to the Interconnection Agreement or past due balances on any accounts Seller has with Company for other services..

10. RECORDS

In addition to the regular meter readings to be taken monthly for billing purposes, Company may require additional meter readings, records, transfer of information, etc. as may be agreed upon by the Parties. Company reserves the right to provide to the Commission or the FERC or any other regulatory body, upon request, information pertaining to this Agreement, including but not limited to: records of the Facility's generation output and Company's purchases thereof (including copies of monthly statements of power purchases and data from load recorders and telemetering installed at the Facility); copies of this Agreement. The Company will not provide any information developed solely by Seller and designated by Seller in writing to be "proprietary" unless required to do so by order of the Commission or the FERC or any other regulatory body or court, in which event, the Company will notify Seller prior to supplying the proprietary information.

Seller shall provide to Company, on a monthly basis within ten (10) days of the meter reading date and in form to be mutually agreed upon by the Parties, information on the Facility's fuel costs (coal, oil natural gas, supplemental firing, etc.), if any, for the power delivered to Company during the preceding month's billing period.

11. METER STOPPAGE OR ERROR

In the event a meter fails to register accurately within the allowable limits established by the state regulatory body having jurisdiction, Company will adjust the measured energy for the period of time the meter was shown to be in error, and shall, as provided in the rules and regulations of the state regulatory body having jurisdiction, pay to Seller, or Seller shall refund to Company, the difference between the amount billed and the estimated amount which would have been billed had the meter accurately registered the kilowatt hours provided by Seller. No part of any minimum service charge shall be refunded.

12. POINT OF DELIVERY

The point of delivery is the point where Company's conductors are, or are to be, connected to Seller's conductors. Seller shall do all things necessary to bring its conductors to such point of delivery for connection to Company's conductors, and shall maintain said conductors in good order at all times. If Seller chooses to deliver power to Company through a point of delivery where Seller presently receives power from Company, then the point of delivery for the purchase of generation shall be the same point as the point of delivery for electric service.

13. INTERCONNECTION FACILITIES

If Seller is not subject to the terms and conditions of the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections as approved in Docket No.

2015-362-E, the following conditions shall apply to Interconnection Facilities necessary to deliver Seller's electricity to Company. Otherwise the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections in Docket No. 2015-362-E govern.

(a) By Company: Company shall install, own, operate, maintain, and otherwise furnish all lines and equipment located on its side of the point of delivery to permit parallel operation of the Seller's facilities with the Company's system. It shall also install and own the necessary metering equipment, and meter transformers, where necessary, for measuring the electricity delivered to Company, though such meter may be located on Seller's side of the point of delivery. Interconnection facilities, installed by either Company or Seller, solely for such purpose, include, but are not limited to connection, line extension, transformation, switching equipment, protective relaying, metering, telemetering, communications, and appropriate safety equipment.

Any interconnection facilities installed by Company necessary to receive power from Seller shall be considered extra facilities and shall be provided, if Company finds it practicable, under the following conditions:

(1) The facilities will be of a kind and type normally used by or acceptable to Company and will be installed at a place and in a manner satisfactory to Company.

(2) Seller will pay to Company a Monthly Interconnection Facilities Charge of 1.1 percent of the estimated original installed cost and rearrangement cost of all facilities, including metering, required to accept interconnection, but not less than $25 per month. The monthly charge for the Interconnection Facilities to be provided under this Agreement is subject to the rates, Service Regulations and conditions of the Company as the same are now on file with the Commission and may be changed or modified from time to time upon approval by the Commission. Any such changes or modifications, including those which may result in increased charges for the Interconnection Facilities to be provided by the Company, shall be made a part of this Agreement to the same effect as if fully set forth herein.

(3) If Company increases its investment, other than replacement of existing equipment with equipment of equal capacity and kind, in interconnection facilities or other special facilities required by Seller (including conversion of the Company's primary voltage to a higher voltage), the Monthly Interconnection Facilities Charge for providing the interconnection facilities will be adjusted at that time. Seller may terminate the interconnection facilities in accordance with the applicable termination paragraph 1 above, or continue the interconnection facilities under the changed conditions.

(4) In lieu of the Monthly Interconnection Facilities Charge of 1.1 percent, Seller may elect to make a contribution equal to the total interconnection facilities investment, plus associated tax gross-ups. After such payment, the Monthly Interconnection Facilities Charge for the interconnection facilities will be 0.3 percent of said payment.

(5) The Monthly Interconnection Facilities Charge as determined shall continue regardless of the term of the Agreement until Seller no longer has need for such facilities. In the event Seller's interconnection facilities should be discontinued or terminated in whole or in part, such discontinuation or termination should be calculated in accordance with 1, above.

(6) Seller's wiring and appurtenant structures shall provide for the location, connection, and installation of Company's standard metering equipment or other equipment deemed necessary by Company for the metering of Seller's electrical output. Company shall, at its expense, be permitted to install, in Seller's wiring or equipment, any special metering devices or equipment as deemed necessary for experimental or monitoring purposes.

(7) Company shall furnish and install the Interconnection Facilities no later than the date requested by Seller for such installation. Seller's obligation to pay the Interconnection Facilities charges shall begin upon the earlier of (1) completion of the installation but no earlier than the requested in-service date specified in the Interconnection Agreement or (2) the date where energy is generated and delivered to the Company and such charges shall apply at all times thereafter during the term of this Agreement, whether or not Seller is actually supplying electric power to Company.

(b) By Seller: Seller shall install, own, operate, and maintain all lines, and equipment, exclusive of Company's meter and meter transformers, on Seller's side of the point of delivery. Seller will be the owner and have the exclusive control of, and responsibility for, all electricity on Seller's side of the point of delivery. Seller must conform to the South Carolina Generator Interconnection Procedures, Forms and Agreements for State-Jurisdictional Interconnections. Seller's wiring shall be arranged such that all electricity generated for sale can be supplied to one point of delivery and measured by a single meter. Company's meter may be located on Seller's side of the point of delivery, and when it is to be so located, Seller must make suitable provisions in Seller's wiring, at a place suitable to Company, for the convenient installation of the type of meter Company will use. All of Seller's conductors installed on the Company's side of the meter and not installed in conduit must be readily visible.

Seller shall install and maintain devices adequate to protect Seller's equipment against irregularities on Company's system, including devices to protect against single-phasing. Seller shall also install and maintain such devices as may be necessary to automatically disconnect Seller's generating equipment, which is operated in parallel with Company, when service provided by Seller is affected by electrical disturbances on Company's or Seller's systems, or at any time when Company's system is de-energized from its prime source.

(c) Access to Premises: The duly authorized agents of Company shall have the right of ingress and egress to the premises of Seller at all reasonable hours for the purpose of reading meters, inspecting Company's wiring and apparatus, changing, exchanging, or repairing Company's property on the premises of Seller, or removing such property at the time of or at any time after suspension of purchases or termination of this Agreement.

(d) Protection: Seller shall protect Company's wiring and apparatus on Seller's premises and shall permit no one but Company's agents to handle same. In the event of any loss of or damage to such property of Company caused by or arising out of carelessness, neglect, or misuse by Seller or Seller's employees or agents, the cost of making good such loss or repairing such damage shall be paid by Seller. In cases where Company's service facilities on Seller's premises require abnormal maintenance due to Seller's operation, Seller shall reimburse Company for such abnormal maintenance cost.

14. CONTINUANCE OF PURCHASES AND LIABILITY THEREFOR

The Parties do not guarantee continuous service but shall use reasonable diligence at all times to provide for uninterrupted acceptance and supply of electricity. Each Party shall at all times use reasonable diligence to provide satisfactory service for the acceptance or supply of electricity, and to remove the cause or causes in the event of failure, interruption, reduction or suspension of service for the acceptance or supply of electricity, but neither Party shall be liable for any loss or damage resulting from such failure, interruption, reduction or suspension of service, nor shall same be a default hereunder, when any interruption of service for the acceptance or supply of electricity is due to any of the following:

(a) An emergency condition or action due to an adverse event and/or condition or disturbance on Company's system, or on any other system directly or indirectly interconnected with it, which requires automatic or manual interruption of the supply of electricity to some customers or areas or automatic or manual interruption, reduction, or cessation of the acceptance of electricity into Company's electrical system in order to limit the occurrence of or extent or damage of the adverse condition or disturbance to Company's system or capability to reliably provide service in compliance and accordance with prudent practices, regulatory requirements, and/or reliability standards, or to prevent damage to generating or transmission facilities, or to expedite restoration of service, or to effect a reduction in service to compensate for an emergency condition on an interconnected system. An emergency condition or action shall include any circumstance that requires action by the Company to comply with any electric reliability organization or NERC/SERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to Seller's Facility, reliability impairment, loss or damage to the Company's system, disruption of generation by the Seller, disruption of reliability or service on the Company's system, an abnormal condition on the system, and/or endangerment to human life or safety

(b) An event or condition of force majeure, as described below.

(c) Making necessary adjustments to, changes in, or repairs on Company lines, substations, and facilities, and in cases where, in its opinion, the continuance of service from Seller's premises would endanger persons or property.

Seller shall be responsible for promptly taking all actions requested or required by Company to avoid, prevent, or recover from the occurrence and/or imminent occurrence of any emergency condition and in response to any emergency condition or condition of force majeure, including without limitation installing and operating any equipment necessary to take such actions.

Seller shall be responsible for insuring the safe operation of its equipment at all times, and will install and maintain, to Company's satisfaction, the necessary automatic equipment to prevent the back feed of power into, or damage to Company's de-energized system, and shall be subject to immediate disconnection of its equipment from Company's system if Company determines that such equipment is unsafe or adversely affects Company's transmission/distribution system or service to its other customers.

Seller assumes responsibility for and shall indemnify, defend, and save Company harmless against all liability, claims, judgments, losses, costs, and expenses for injury, loss, or damage to persons or property including personal injury or property damage to Seller or Seller's employees on account of defective construction, wiring, or equipment, or improper or careless use of electricity, on Seller's side of the point of delivery.

15. FORCE MAJEURE

Circumstances beyond the reasonable control of a Party which solely cause that Party to experience delay or failure in delivering or receiving electricity or in providing continuous service hereunder, including: acts of God; unusually severe weather conditions; earthquake; strikes or other labor difficulties; war; riots; fire; requirements shall be deemed to be "events or conditions of force majeure". It also includes actions or failures to act on the part of governmental authorities (including the adoption or change in any rule or regulation or environmental constraints lawfully imposed by federal, state or local government bodies), but only if such requirements, actions or failures to act prevent or delay performance; or transportation delays or accidents. Events or conditions of force majeure do not include such circumstances which merely affect the cost of operating the Facility.

Neither Party shall be responsible nor liable for any delay or failure in its performance hereunder due solely to events or conditions of force majeure, provided that:

(a) The affected Party gives the other Party written notice describing the particulars of the event or condition of force majeure, such notice to be provided within forty-eight (48) hours of the determination by the affected Party that an event or condition of force majeure has occurred, but in no event later than thirty (30) days from the date of the occurrence of the event or condition of force majeure;

(b) The delay or failure of performance is of no longer duration and of no greater scope than is required by the event or condition of force majeure, provided that in no event shall such delay or failure of performance extend beyond a period of twelve (12) months;

(c) The affected Party uses its best efforts to remedy its inability to perform;

(d) When the affected Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party prompt written notice to that effect; and,

(e) The event or condition of force majeure was not caused by or connected with any negligent or intentional acts, errors, or omissions, or failure to comply with any law, rule, regulation, order or ordinance, or any breach or default of this Agreement.

16. INSURANCE

Seller shall obtain and retain, for as long as the generation is interconnected with Company's system, either the applicable home owner's insurance policy with liability coverage of at least $100,000 per occurrence or the applicable comprehensive general liability insurance policy with liability coverage in the amount of at least $300,000 per occurrence, which protects Seller from claims for bodily injury and/or property damage. This insurance shall be primary for all purposes. Seller shall provide certificates evidencing this coverage as required by Company. Company reserves the right to refuse to establish, or continue the interconnection of Seller's generation with Company's system, if such insurance is not in effect.

17. GOVERNMENTAL RESTRICTIONS

This Agreement is subject to the jurisdiction of those governmental agencies having control over either party or over this Agreement. This Agreement shall not become effective until all required governmental authorizations are obtained. Certification of receipt of all permits and authorizations shall be furnished by Seller to Company upon Company's request. This Agreement shall not become effective unless it and all provisions thereof are authorized and permitted by such governmental agencies without change or conditions.

This Agreement shall at all times be subject to changes by such governmental agencies, and the parties shall be subject to conditions and obligations, as such governmental agencies may, from time to time, direct in the exercise of their jurisdiction, provided no change may be made in rates or in essential terms and conditions of this contract except by agreement of the parties to this contract. Both parties agree to exert their best efforts to comply with all of the applicable rules and regulations of all governmental agencies having control over either party or this Agreement. The parties shall take all reasonable action necessary to secure all required governmental approval of this Agreement in its entirety and without change.

The delivery date, quantity, and type of electricity to be accepted for purchase by Company, from Seller, are subject to changes, restrictions, curtailments, or complete suspensions by Company as may be deemed by it to be necessary or advisable (a) on account of any lawful order or regulation of any municipal, State, or Federal government or agency thereof, or order of any court of competent jurisdiction, or (b) on account of any emergency due to war, or catastrophe, all without liability on the part of the Company therefor.

Figure 3: Avoided Capacity Rate Design Pricing Periods

Filed Capacity Rates

Independent Capacity Price Blocks			1) Summer Capacity								2) Winter AM Capacity								3) Winter PM Capacity					
Company Rate (cents/KWH)			DEC 0.21		DEP 0.00						DEC 0.97		DEP 11.15						DEC 0.31		DEP 4.78			
DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jul - Aug)																	(1) Summer Capacity							
Winter (Dec - Mar)							(2) Winter AM Capacity												(3) Winter PM Capacity					

Prior Capacity Rates

Independent Capacity Price Blocks						1) Summer Capacity										2) Non-Summer Capacity								
Company Rate (cents/KWH)						DEC 6.68		DEP 6.27								DEC 2.58		DEP 2.43						
DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun - Sep)														(1) Summer Capacity										
Non-Summer (Oct - May)							(2) Non-Summer Capacity																	

Figure 4: Avoided Energy Rate Design Pricing Periods

Filed Energy Rates

Independent Energy Price Blocks	1) Summer On Peak Energy		2) Non-Summer AM On Peak Energy		3) Non-Summer PM On Peak Energy		4) Summer Off Peak Energy		5) Non-Summer Off Peak Energy	
Company Rate (cents/KWH)	DEC	DEP	DEC	DEP	DEC	DEP	DEC	DEP	DEC	DEP
	4.00	3.31	4.31	3.78	3.87	3.40	2.64	2.71	2.66	2.49

DEC Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (May - Sep)	4) Summer Off Peak Energy												(1) Summer On Peak Energy											(4) Off
Non-Summer (Oct - Apr)	(5) Non-Summer Off Peak Energy					(2) Non-Sum AM On Peak Energy					(5) Non-Summer Off Peak Energy					(3) Non-Summer PM On Peak Energy								(5) Off

DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (May - Sep)	4) Summer Off Peak Energy													(1) Summer On Peak Energy										
Non-Summer (Oct - Apr)	(5) Non-Summer Off Peak Energy					(2) Non-Sum AM On Peak Energy				(5) Non-Summer Off Peak Energy						(3) Non-Summer PM On Peak Energy								

Prior Energy Rates

Independent Energy Price Blocks	(1) On Peak Energy		(2) Off Peak Energy	
Company Rate (cents/KWH)	DEC	DEP	DEC	DEP
	5.04	4.71	4.09	4.15

DEC / DEP Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Summer (Jun - Sep)	(2) Off Peak Energy													(1) On Peak Energy								(2) Off Peak Energy		
Non-Summer (Oct - May)	(2) Off Peak Energy					(1) On Peak Energy								(2) Off Peak Energy										